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A MANAGEMENT SURVEY

SIMMONS MACHINE TOOL CORPORATION, ALBANY, NEW YORK

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A MANAGEMENT SURVEY

by

The NAVAL AND MARINE CORPS OFFICERS
in the
MANAGEMENT ENGINEERING PROGRAM

A Group Thesis Submitted to the Faculty
of the Department of Management Engineering
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE

SIMMONS MACHINE TOOL CORPORATION
ALBANY, NEW YORK

Rensselaer Polytechnic Institute
Troy, New York

June 1959

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ABSTRACT

Thesis

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FOREWORD

The Management Survey of the Simmons Machine Tool Corporation, Albany, New York, was arranged by the Department of Management Engineering of the Rensselaer Polytechnic Institute, to provide a study group of fifteen Naval and Marine Corps officers with the opportunity to observe and apply the theoretical and practical concepts of management principles to a successful industrial organization.

The study was conducted during a period of approximately fourteen weeks during which plant visits, data collection and discussion generally was limited to one and one-half days per week. Although the total time allotted to the study was limited, the proximity of the plant to the Troy area made additional visits possible which permitted the group to become well acquainted with the personnel and operations of the corporation in the time available.

The material in this report covers the manner in which the corporation is operating at the present time and an analysis is made of these operations divided according to the functions being performed. The analysis of each function is followed by recommendations which, in the opinion of the study group, would result in better operating efficiency if they were implemented.

Efforts have been made to make the study of the organization and its functions from an objective standpoint to minimize the personnel and personality considerations. Although these factors may have crept into the analysis sections unintentionally, the recommendations scrupulously avoided personnel considerations.

No specific time base has been established for implementation of the recommendations made in this report; however, the recommendations summarized in this introductory section of the report are considered to be of major importance and should therefore receive first consideration.

The recommendations and supporting discussion in the various chapters are made strictly from an overall management analysis approach. The purpose of this report was to point up those areas where attention is required. In many areas no attempt was made to include the specific details or techniques applicable to these problems, since they will vary with the approaches used by industrial relations and industrial engineering personnel who would normally implement them.

ACKNOWLEDGEMENT

It is the desire of the group to express their appreciation and thanks to Mr. C. A. Simmons, Sr., President of the Simmons Machine Tool Corporation for his generosity in making available the opportunity to conduct this survey.

Sincere appreciation is extended to the following management personnel who have given generously of their time to provide the necessary data upon which to base this report: Mr. C. A. Simmons, Jr., Mr. H. H. Rose, Mr. A. Streck, Mr. K. C. Spooner, Mr. T. TenEyke, Mr. R. A. Dechene, Mr. W. H. Miller, Mr. J. S. French, Mr. K. McDonald, Mr. Schleuter, Mr. Strobel, and Mrs. Brunnell.

Unfortunately, it is impossible to identify here the many employees of the Simmons Machine Tool Division and the Simmons Fastener Division who supplied valuable information during the conduct of this study. It is hoped that they will accept this general acknowledgement of their interest and help.

The group is indebted to Professor W. Franklin Spafford, Head, Department of Management Engineering, Rensselaer Polytechnic Institute and the members of the Management Engineering faculty for their guidance and encouragement during this study.

Finally, grateful acknowledgement is made to Mrs. Leo Hayes for the competent manner in which she has prepared the manuscript of this thesis.

HISTORY

The Simmons Machine Tool Corporation was founded by Mr. Charles A. Simmons in 1910. The business commenced operations with two employees and 1500 square feet of floor area. The subsequent growth of this concern parallels the rise of the machine tool rebuilding business as an established industry in which Simmons Machine Tool Corporation has been a recognized leader despite its relatively small size. By having the capability of rebuilding machines and machine tools with such precision that they could be covered with a guarantee equal to that of new equipment, the organization grew steadily until it reached its peak during World War II when it employed over 600 persons and occupied 120,000 square feet of floor area. During this period the Simmons Machine Tool Corporation received the Ordnance Award for Achievement and Army and Navy "E" Production Award.

Since World War II the operations in the machine tool rebuilding field has been reduced commensurate with the demand of industry but it still serves customers throughout the United States and abroad. To compensate for the reduced activity in this field, the organization expanded into several other areas of operation and now consists of the following subsidiaries under the parent organization:

Simmons Machine Tool Division
Simmons Fastener Division
Simmons Fastener Corporation
Simmons Industries Incorporated
Sim-Par Manufacturing Corporation
H. M. C. Corporation
Simmons Real Estate Corporation

The Simmons Fastener Division started operations in May 1945 on a small contract for cowling fasteners. At the end of World War II this contract was suddenly terminated and the company turned to the manufacture of a fastener for caskets. This was a very sizeable contract which utilized the entire resources of the plant for two years. The next development was a metallic refrigerator shelf support and in 1949 the plastic coated SPRING-LOCK was developed. Since 1945 there has been a continuous growth of the Division

as to capacity, out-put and variety of fastener designs. Primary emphasis is placed on adopting basic fastener designs to specific customers' requirements.

The Simmons Fastener Corporation was established to market the fasteners designed and produced by the Simmons Fastener Division.

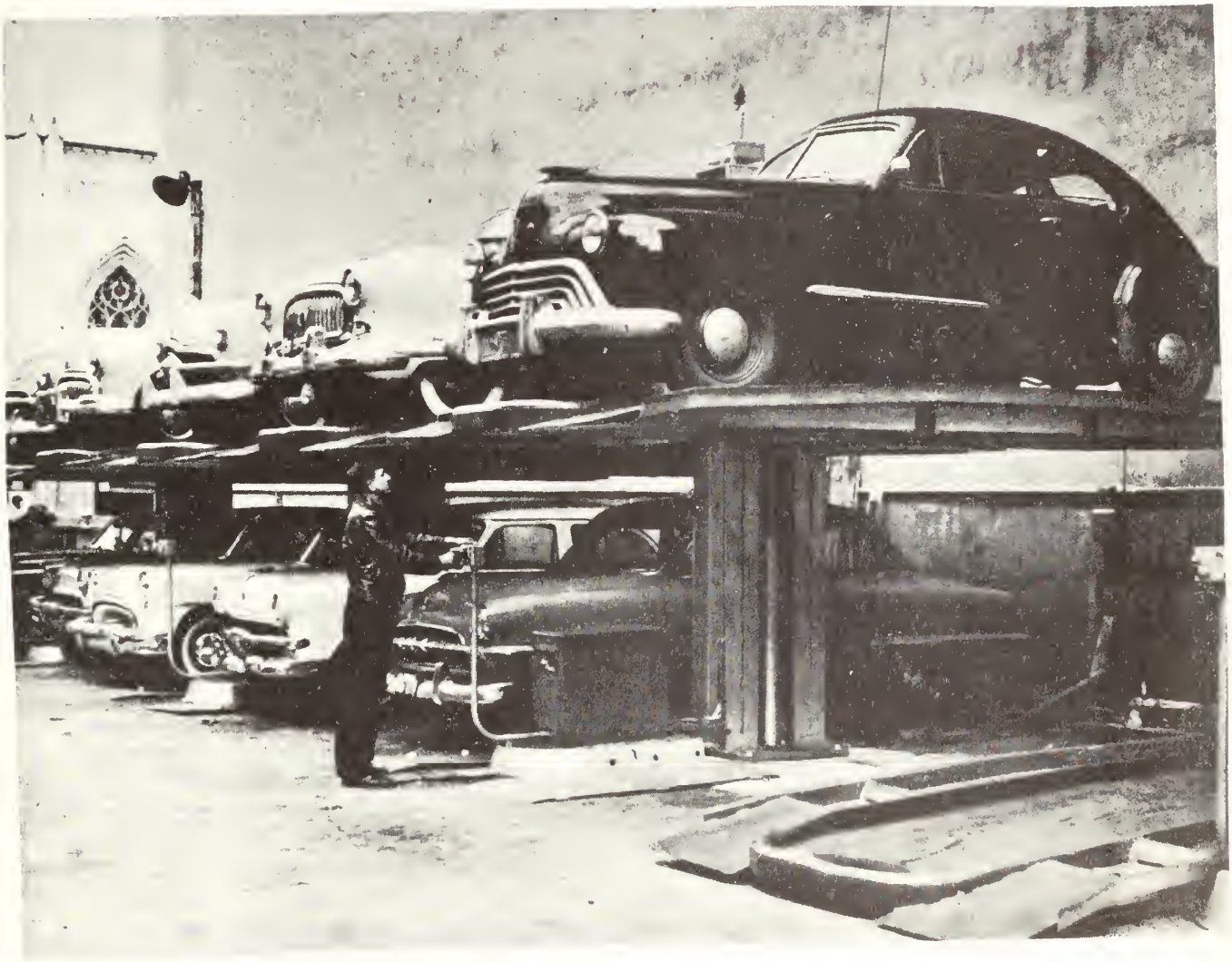
Simmons Industries, was incorporated in 1950 to handle the manufacture, promotion and sale of the "SKY-PARK". The "SKY-PARK" (Shown in Plate I) is a simple hydraulic lift designed to hoist two cars independently with sufficient space under the cars on the hoist to park two other full-sized automobiles. The purpose of the machine is to increase the parking capacity of parking areas in congested city shopping and business sections. In February 1959 Simmons Industries started the promotion of a new parking machine, the "PARK-EM-ALL". This machine makes it possible to park automobiles eight high and two abreast.

Simmons Real Estate Corporation and H.M.C. Corporation are organizations, separately incorporated, for the management and handling of various real estate holdings.

In 1941, as Chairman of the Board of the Corporation, Mr. Simmons, Sr., retired from full-time participation in the Corporation, and control passed to Mr. Charles A. Simmons, Jr., President of the Corporation. However, in 1955, Mr. Simmons, Sr. returned to active participation in the Corporation and eventually assumed the title of President, Simmons Machine Tool Corporation, with Mr. C. A. Simmons, Jr., as Chairman of the Board.

Today, at the age of 75, Mr. Simmons, Sr. is the dominant and controlling figure in the Simmons Machine Tool Corporation and Subsidiary Divisions.

Simmons Industries, Inc.
Albany 1, N. Y.



"SKY-PARK" INSTALLATION

PLATE I

AREAS OF EMPHASIS OF REPORT

This report will deal largely with the two industrial divisions of the Simmons Machine Tool Corporation which are the Machine Tool and the Simmons Fastener Divisions.

Simmons Machine Tool Division

The Simmons Machine Tool Division, the largest division, serves the machine and machine tool industry with three closely integrated services:

I. The purchase and resale of used machine tools, rebuilt under Simmons Tested Engineering Rebuilding Standards.

II. Engineered rebuilding and modernizing of machines and machine tools on a service-contract basis.

III. The design and manufacture of new standard and special purpose machine tools.

In rebuilding and modernizing machines, the Simmons Machine Tool Division can perhaps be regarded as a mechanical clinic. Each machine is carefully analyzed when it comes into the plant for rebuilding. Then it is completely dismantled to the main castings and thoroughly cleaned. All the worn or damaged parts that affect the operation of the machines are renewed. Worn shafts or bearings are replaced or resurfaced as required. The machine is reassembled along the lines followed by the original manufacturer, or improved by the substitution or addition of more modern and efficient components, and then operated and tested under power.

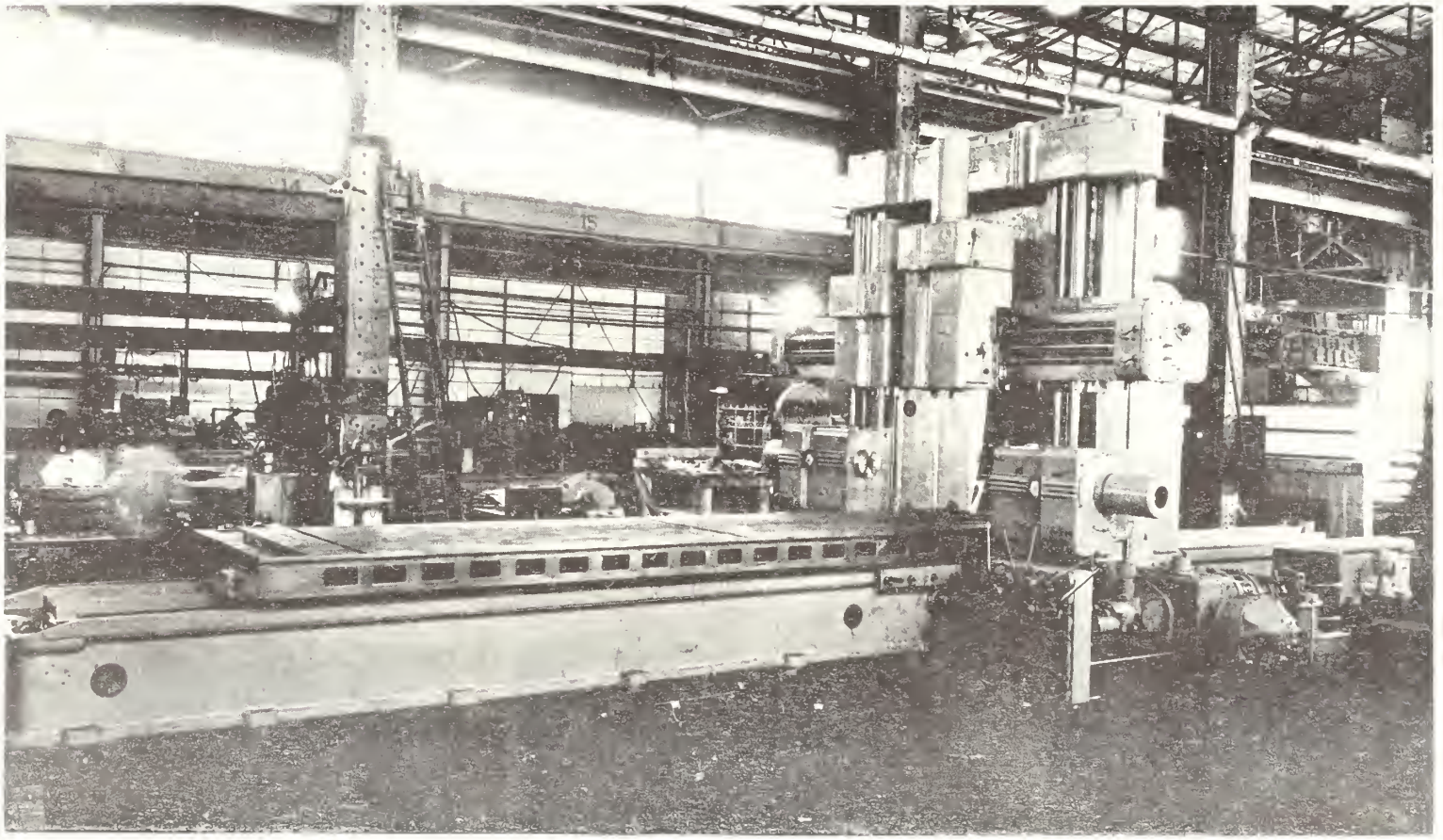
An example of the type of equipment that can be rebuilt by the Machine Tool Division is the Ingersoll 72" x 72" x 22" double-housing planer type milling machine. This machine is shown in Plate II after having been rebuilt by Simmons.

Although the "SKY-PARK" Machines are marketed by Simmons Industries Incorporated, it is manufactured at the present time by the Machine Tool Division.

Simmons Fastener Division

The Fastener Division is engaged in the manufacture of small metal parts used in the fabrication of a line of metal fasteners and plastic refrigerator shelf holders. The metal inserts used in the manufacture of the refrigerator shelf holders differ only in size while the line of metal fasteners comprise a series of different designs with a large number of variations within each design. Examples of fasteners typical of their production is shown in Plate III. The production is based largely on customers' orders and their operations while working on any individual order can be described as repetitive. When the fasteners have been manufactured by the Fastener Division, they are sold to the Simmons Fastener Corporation, which is the sales corporation. The personnel who actually sell and ship the fasteners are all employees of the Fastener Division of the Simmons Machine Tool Corporation.

SIMMONS
ENGINEERED
Rebuilding
GIVES MACHINE TOOLS A NEW LEASE ON LIFE



A TYPICAL HEAVY MACHINE TOOL REBUILT BY THE MACHINE TOOL DIVISION

PLATE II

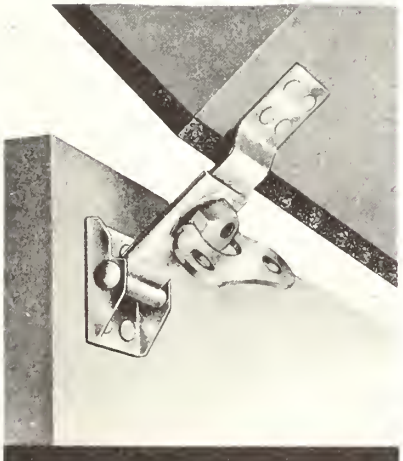
Plastic SPRING-LOCK

SPRING-LOCK

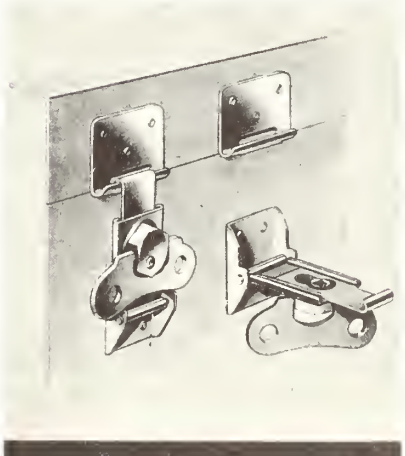
ROTO-LOCK

TYPICAL FASTENERS
PRODUCED BY THE
SIMMONS FASTENER
DIVISION

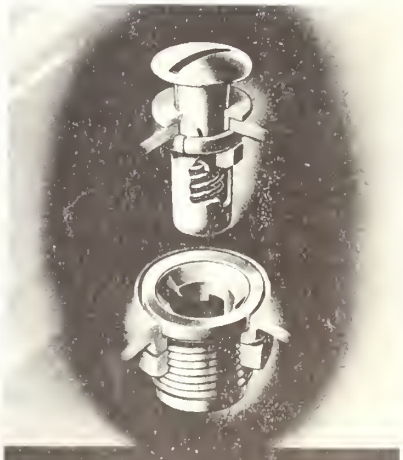
DUAL-LOCK



HINGE-LOCK



LINK-LOCK



QUICK-LOCK

PLATE III

SUMMARY OF MAJOR RECOMMENDATIONS

The major recommendations are assembled here in summary form. A complete list of recommendations is presented with their applicable chapters.

It is recommended that:

1. A formal organization chart be developed and promulgated. (Chapter 1)

2. Each position controlling the function shown on the organization chart be defined in regard to duties, responsibilities, and authorities. (Chapter 1)

3. A full time Industrial Relations Director be installed. (Chapter 2)

4. Job and position description be written for each job and position. (Chapter 2)

5. Consideration be given to the retention of a professional market research organization on a consulting basis to serve all divisions. (Chapter 3)

6. Management institute or refine as necessary present methods of cost accumulation which will provide all information to determine the actual costs of manufacturing as the basis for establishing standards. (Chapter 4)

7. Consideration be given to the establishment of an appropriate standard cost system upon which flexible budgeting may be used. (Chapter 4)

8. A detailed study be conducted of office procedures and paper work flow to eliminate all unnecessary work steps. (Chapter 4)

9. The historical information utilized by shop personnel to estimate jobs be formalized and used as a basis for rough scheduling by work centers. (Chapter 6)

10. Every effort be made by top management to limit changes in priority assignments so that men and facilities of the shop may be utilized more economically. (Chapter 6)

11. The Production Manager be provided with an adequate staff of personnel to permit the discharge of normal production planning and control functions. (Chapter 6)

12. Concerted effort be made to schedule fastener orders in economic lot sizes, not only through the shop but through the outside operations of plating and plastics. (Chapter 6)

13. The Sales Order (for metal fasteners) and the Vendors Shipping Schedule (for plastic fasteners) be considered as firm production orders which cannot be varied with respect to quantity without issuance, by the Production office, of written change order. (Chapter 6)

14. Full responsibility for material control, including receipt, custody, issue and record keeping be assigned to the Material Control Section of the Production Control Department, Fastener Division, and that acceptable procedures be defined. (Chapter 7)

15. A simplified system be adopted to permit accounting for component parts inventory in the Fastener Division. (Chapter 7)

16. Responsibility for quality control in the Fastener Division be assigned to the Production Department. (Chapter 7)

17. An Industrial Engineer be assigned to the staff of the Machine Tool Corporation to serve all divisions. (Chapter 8)

18. A one-half ton fork lift truck be procured prior to any rearrangement of the Fastener Division plant. (Chapter 9)

19. Fastener Division storage facilities necessary to establish a coordinated material control system be provided without delay. (Chapter 9)

20. No further encroachment be made on the existing manufacturing area in the Fastener Division by anticipated expansion of office space. (Chapter 9)

CHAPTER 1 - ORGANIZATION

1.1 Introduction. The only formal organization chart that was in existence at the Simmons Machine Tool Corporation was one that was in effect in 1941 when the level of operation was considerably different from that at the present time and therefore it is no longer used. At the present time the Simmons Machine Tool Corporation and its subsidiaries keep no formal organization charts. This appears to stem from the desire of top management to maintain direct control at all levels of operation of the organization. The lack of formal charts has resulted in the inability of many members of management to define precisely the limits of their responsibility which has caused an overlap in some areas and left others untouched. Specific examples are discussed in the various chapters of this report.

This chapter is devoted primarily to the presentation of the overall organizational structure of the Simmons Machine Tool Corporation, the departments within the Corporation and the Divisions. Specific analysis of organizational problems as they apply to individual divisions or departments are discussed in the applicable sections of this report.

It was impossible to establish a chart which might approximate the formal organization as management visualized it because of the divergent opinions of members of management as to the inter-relation of the various functions and positions. The informal organization was therefore developed by defining the functions on the basis of information supplied from the person in the position controlling the function, his superior in the organization, the people working for him, a combination of these sources or in some cases by analyzing his function in the organization.

An analysis was made of the informal organization and changes are proposed based on practices which are generally accepted in the field of management. The basic objectives used in the rearrangement were to group similar functions together, separate those which involved a conflict of interests, and establish definite lines of responsibility and authority.

It must be realized that a new organizational structure alone will not result in an improvement in opera-

tions unless the basic principles of organization are also recognized and applied. These important principles are set forth and defined briefly below.

OBJECTIVE - Prior to setting up an organization, decide what the organizational structure is to accomplish.

SPECIALIZATION - Decide how many specialties are required and divide the responsibilities accordingly.

UNITY - Establish a chain of command in the organization so that no man will be called upon to serve two masters.

SPAN OF CONTROL - Analyze the position and spread a man's talent only as far as he can efficiently handle the responsibility. In other words, limit the number of subordinates he must supervise.

DECENTRALIZATION OF AUTHORITY AND RESPONSIBILITY - Decide on the extent that decentralization is practical. In general, let the decision be made as close to the scene of the operation as is compatible with management's requirement for control.

DEFINITION - Define the responsibility and authority that accompanies the position. Write a good job description.

CORRESPONDENCE - Give the position the authority commensurate with the responsibility.

The proposed changes in the organization which are suggested in the subsequent sections of this chapter are made on the premise that the preceeding principles will be used in any reorganization.

1.2 Simmons Machine Tool Corporation.

1.2.1 Present Organization. An informal organization chart is presented in Figure 1-1 to portray the present organizational structure as it appears to be. The responsibilities and duties of the position controlling each function on the

chart are described briefly below in the order that the functions appear on the chart from top to bottom:

Board of Directors. The Simmons Machine Tool Corporation is governed by a five-member board of directors. Three of the members are inside and two are outside of the organization. The three inside members are the President and Vice-President of the Simmons Machine Tool Corporation and the President of the HMC Corporation who is Chairman of the Board.

President. The President has the usual responsibilities for planning, development, and approval of specific programs and general policies established for the corporation. In addition, the President exercises rather unusual control in that he is the sole approving authority in many routine matters.

Assistant to the President. The Assistant to the President represents the President in matters of administrative policy and other specific duties as may be assigned by the President.

Vice-President. The Vice-President has the responsibilities of advising the President on legal and financial matters. He is also the Secretary and Comptroller of the corporation.

Head, Engineering Department. The head, Engineering Department, reports directly to the President. He is responsible for all designs of new equipment and the preparation of basic cost estimates for these designs.

Personnel Director. The Personnel Director has very limited duties within the functions of the Personnel Department. Personnel duties are of a minor collateral nature, with primary duties as Internal Auditor.

Purchasing Agent. The Purchasing Department is headed by the Purchasing Agent who reports directly to the President. By reason of the large amount of purchasing required, the Purchasing Department is accorded departmental status. The Purchasing Agent performs all the purchasing functions without the benefit of any exclusive assistants.

Office Manager. The Office Administration Department is headed by a manager who reports directly to the President. The Office Manager is responsible for the office

procedures, filing, stenographic services and office personnel. The office is organized as shown in Figure 1-2.

Assistant Comptroller. The Assistant Comptroller organizationally reports to the comptroller but has access and accountability to the President. He is responsible for the management of the normal accounting department functions. A detail breakdown of the department organization is presented as Figure 1-3.

General Manager, Fastener Division. The General Manager reports directly to the President and is responsible for the entire operation of the Fastener Division.

Shop Superintendent. The Machine Tool Division is headed by the Shop Superintendent who reports directly to the President. He is responsible for the operation of the machine shop which includes establishing specifications for the modernization of used machines, production planning and control and the inspection of finished goods. He is also responsible for the material handling, electrical and machining operations, and assembly and disassembly. The various functions are as shown in Figure 1-4 and are supervised by five foremen.

General Sales Manager. The Sales Department is headed by a Sales Manager who reports directly to the President. The Sales Manager directs four sales representatives and shares a clerical force with the Purchasing Department as shown in Figure 1-5. The field sales representatives are responsible to the General Sales Manager for sales operations in their areas, and the office salesman for sales originating in the office and for inquiries received by mail.

1.2.2 Analysis of the Informal Organization. An analysis of the organizational structure set forth on the informal chart reveals one mechanical weakness. That is the fact that the Assistant Comptroller who heads the Accounting Department is not basically responsible to the Comptroller and is responsible directly to the President. However, as was pointed out in the introductory subsection 1.1, the operation of an organization is dependent on far more than a proper organizational structure. The fundamental organizational principles must be applied to the mechanics of the organization to make it work efficiently.

The course of investigation upon which this chart was based revealed that the fundamental weaknesses in the organization resulted largely from violation of the principles of unity, decentralization of authority and responsibility, definition, and correspondence. Specifically, the chain of command is not honored and at times some individuals were not certain as to whom they were responsible. Responsibility and authority is retained to a large degree by the upper level of management which delays the decision often required to expedite the work. Many of the supervisors are not sure of what responsibility and authority they possess. Finally, in instances where responsibility has been decentralized, the commensurate authority has not been delegated to the individual.

1.2.3 The Proposed Organization. The proposed organization is presented in Figure 1-6. The only change to the informal organizational chart (Figure 1-1) is the separation of the Comptroller functions from those of the Vice-President and Secretary so that the official charged with accounting reports to only one person. Positions for an Industrial Relations Director and an Industrial Engineer have been added. The detailed discussion of the requirements for these functions is covered in Chapters 2 and 8 respectively.

1.3 Simmons Fastener Division.

1.3.1 Present Organization. The Fastener Division is headed by a General Manager who is in the organization of the Simmons Machine Tool Corporation as shown in Figure 1-1. The Division operates under the General Manager and appears to be organized as shown in Figure 1-7. The various positions and responsibilities under the General Manager are as follows:

Development and Design. The Designer is responsible to the General Manager for the design and development of new types of fasteners and the development of equipment to produce them.

Office Management. The Office Manager is responsible to the General Manager for the office procedures, filing, stenographic services and office personnel. The office is organized as shown in Figure 1-8.

Production Planning and Control. The Production Manager is responsible to the General Manager for the pro-

duction, planning and control for the manufacture of all fasteners.

Manufacturing. The Plant Superintendent is responsible to the General Manager for the plant operation and meeting the production schedules.

Assistant Sales. The Assistant Sales Manager is responsible to the General Manager and assists him in handling the sales functions of all Fastener Division's products through sales representatives throughout the country.

Technical Sales. The Technical Sales Representative is responsible to the General Manager and assists him in the sale of special purpose fasteners and customer service.

Shipping and Receiving. The Shipping and Receiving Manager is responsible to the General Manager for the receipt and storage of incoming materials and shipping of finished goods.

1.3.2 Analysis of the Informal Organization. An analysis of the informal organization of the Fastener Division reveals no mechanical weaknesses. However, several violations of the principles of organization makes a rearrangement of the structure desirable. The two principles deserving special consideration are those of specialization and definition. The organization is specialized as far as the listed functions are concerned but further specialization and delegation is required to be able to carry out the many duties that fall under the heading of Production planning and control. It is also necessary to define the responsibility and authority that accompanies a position. At the present time there appears to be considerable overlap between the duties of the production manager and the plant superintendent and several areas in which no responsibility appears to be accepted. An example of overlap is in the area of material handling and control. An area in which no one appears ready to accept responsibility is that of material storage.

1.3.3 Proposed Organization. The proposed organization for the Simmons Fastener Division is presented in Figure 1-9. The line functions have been divided into Production and Sales. The Production function has been further divided

into Production Planning and Control and Manufacturing. The functions under Production Planning and Control have been further separated to provide for Scheduling, Material Control, Quality Control and Receiving and Shipping. The Manufacturing section will operate in the manner that it is at present. However, the function is divided into the Machine Shop and the Production Shop for organizational purposes. The sales functions have been combined under centralized control. A detailed discussion of the breakdown of the responsibilities under the Production Manager will be presented in the applicable chapters.

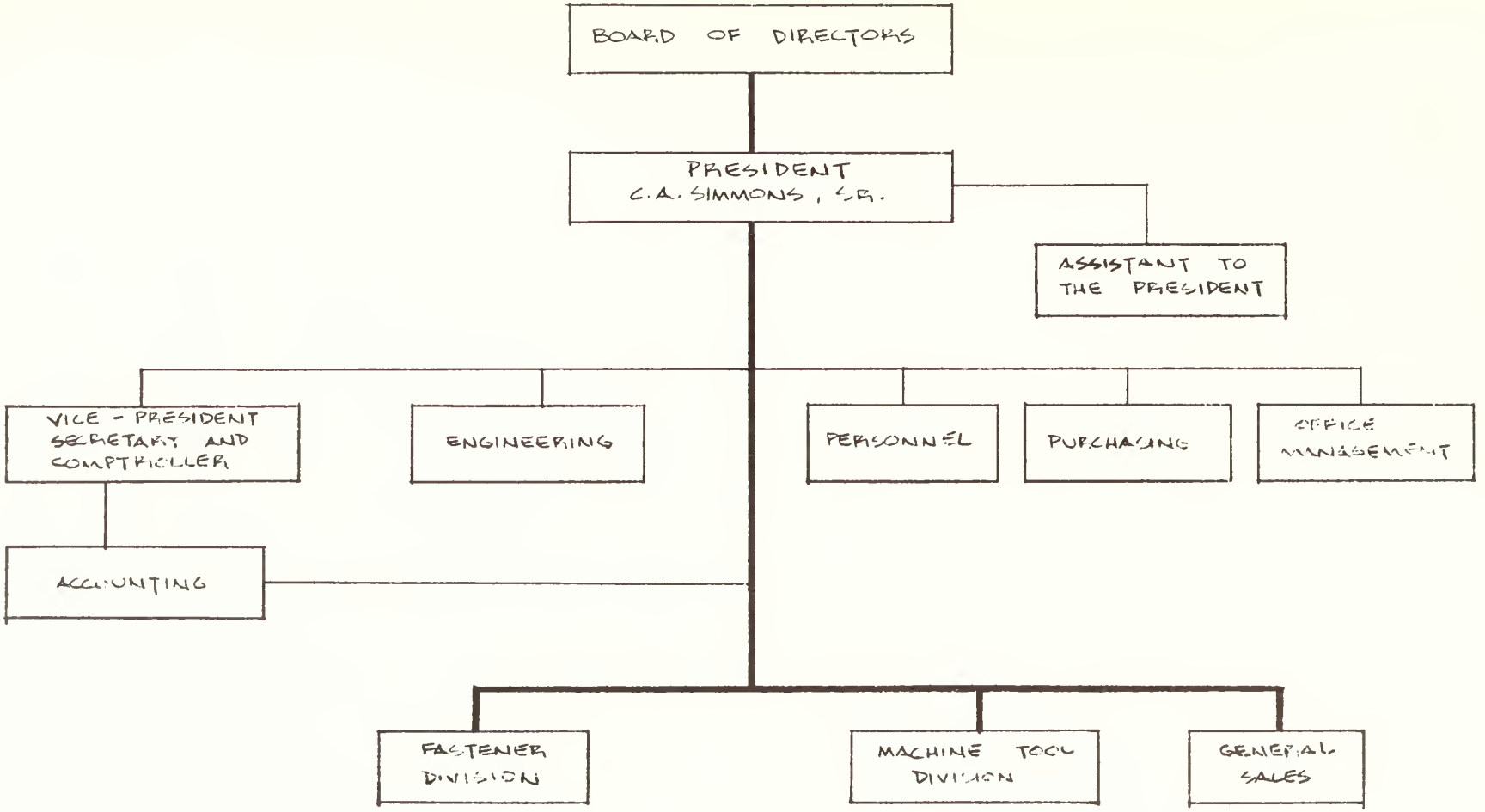
1.4 Recommendations. It is recommended that:

1. A formal organization chart be developed and promulgated.

2. The chart include the function of supervisory personnel down to and including the first supervisory level.

3. Each position controlling the function shown on the organization chart be defined in regard to duties, responsibilities and authorities.

FIGURE 1-1



INFORMAL ORGANIZATION OF THE SIMMONS MACHINE TOOL CORPORATION

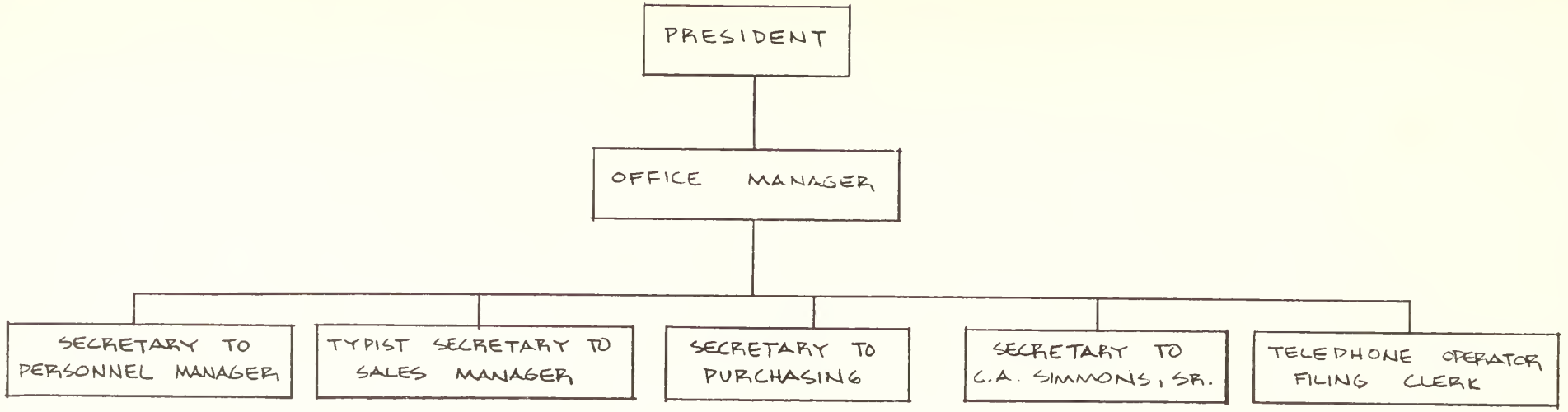
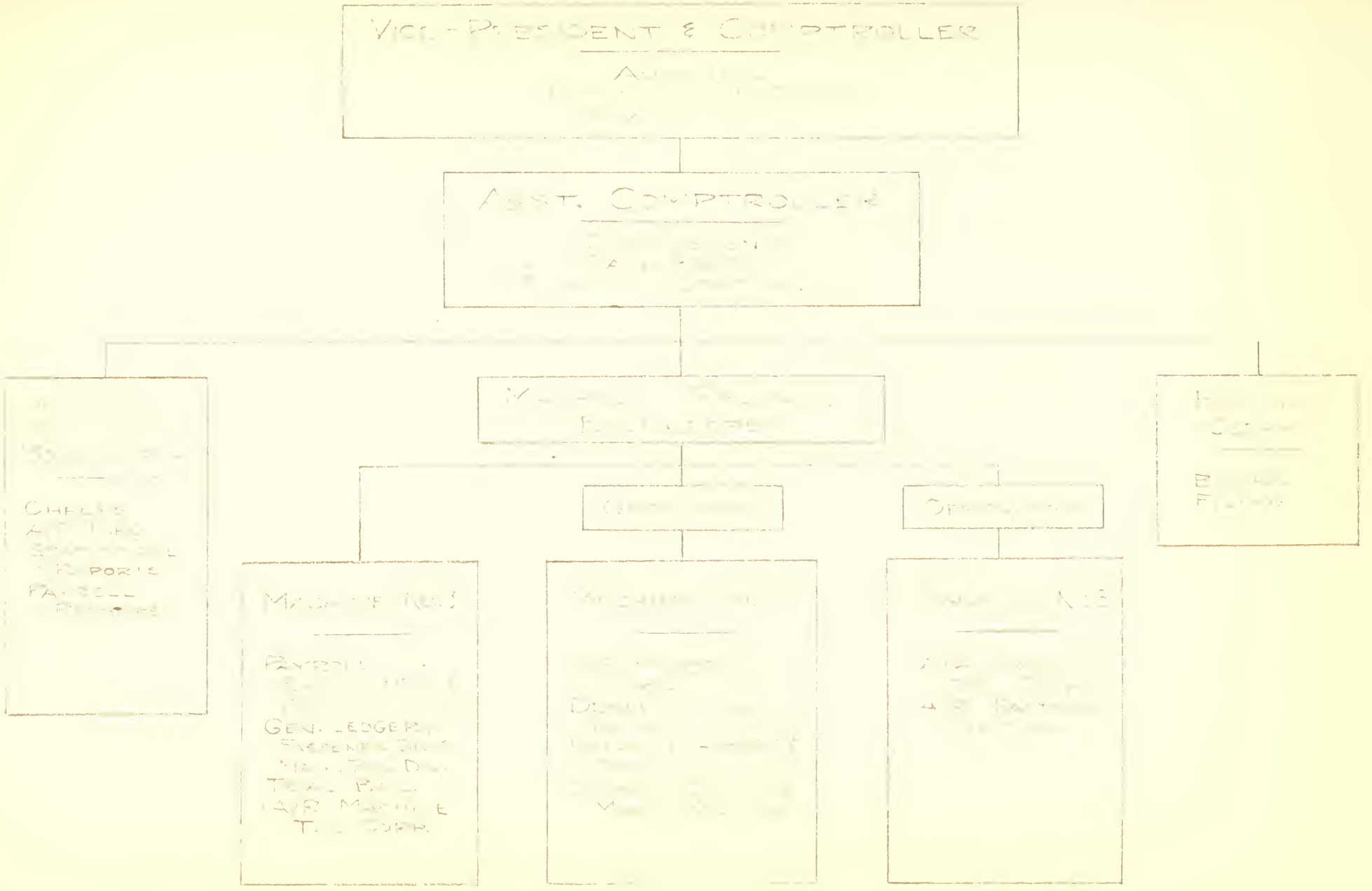


FIGURE 1-2

OFFICE ORGANIZATION SIMMONS MACHINE TOOL CORPORATION



ACCOUNTING DEPARTMENT ORGANIZATION

FIG. 1-3

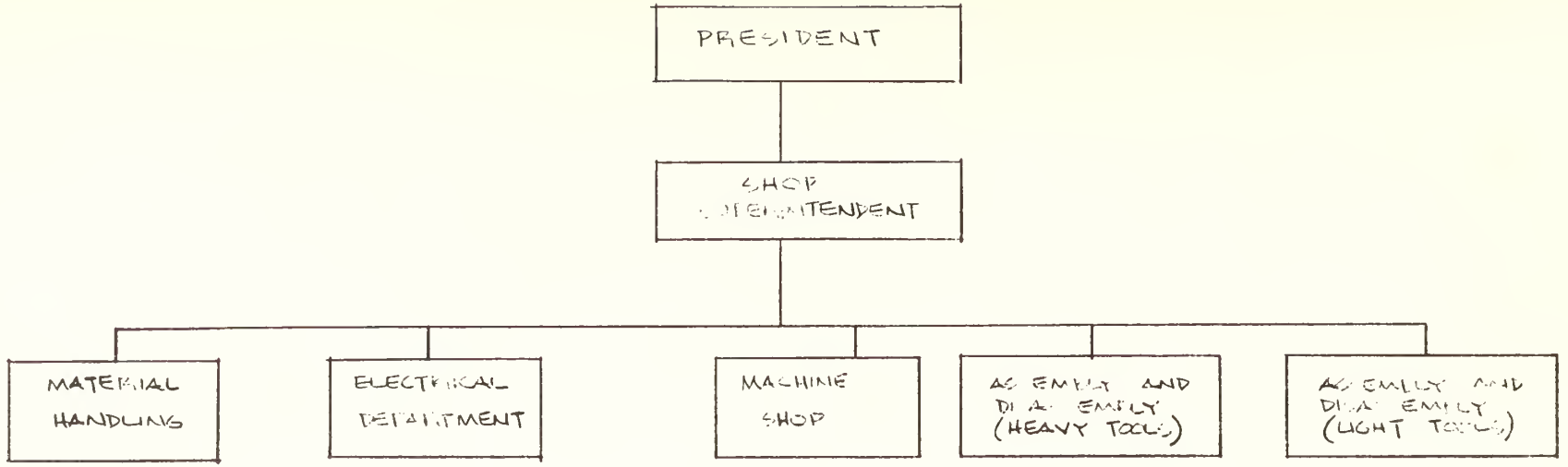
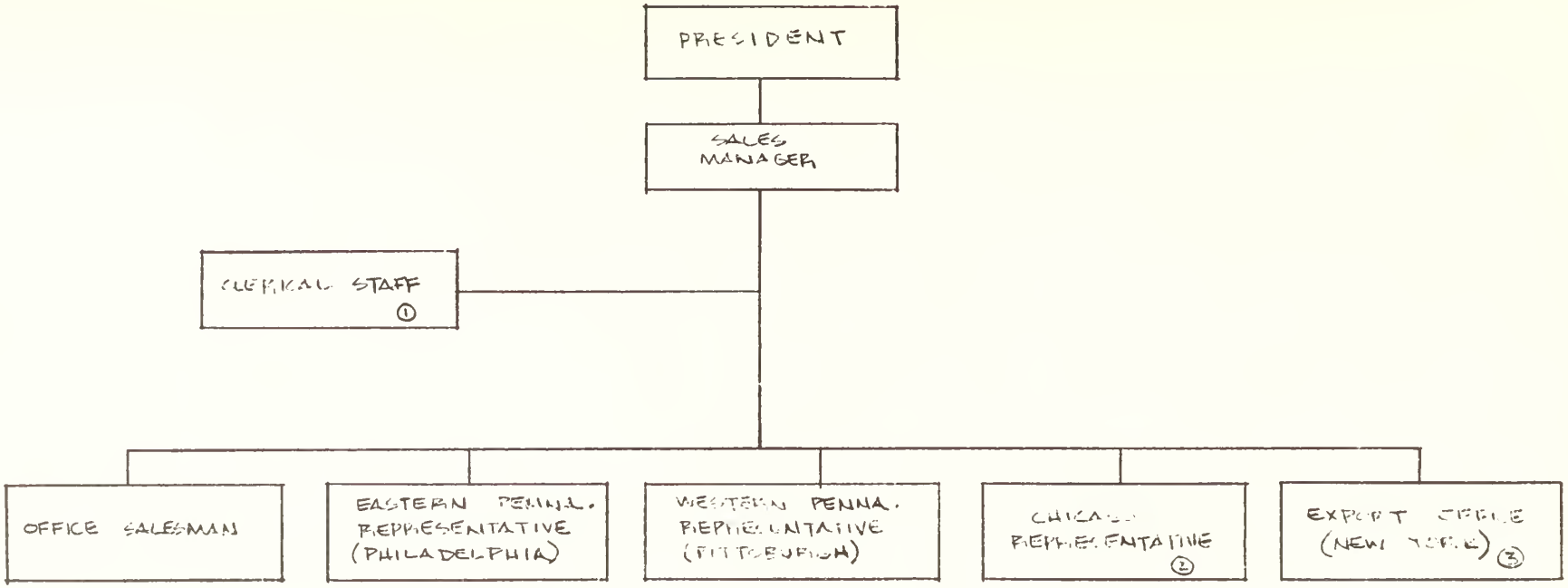


FIGURE 1-4

ORGANIZATION OF THE MACHINE TOOL DIVISION



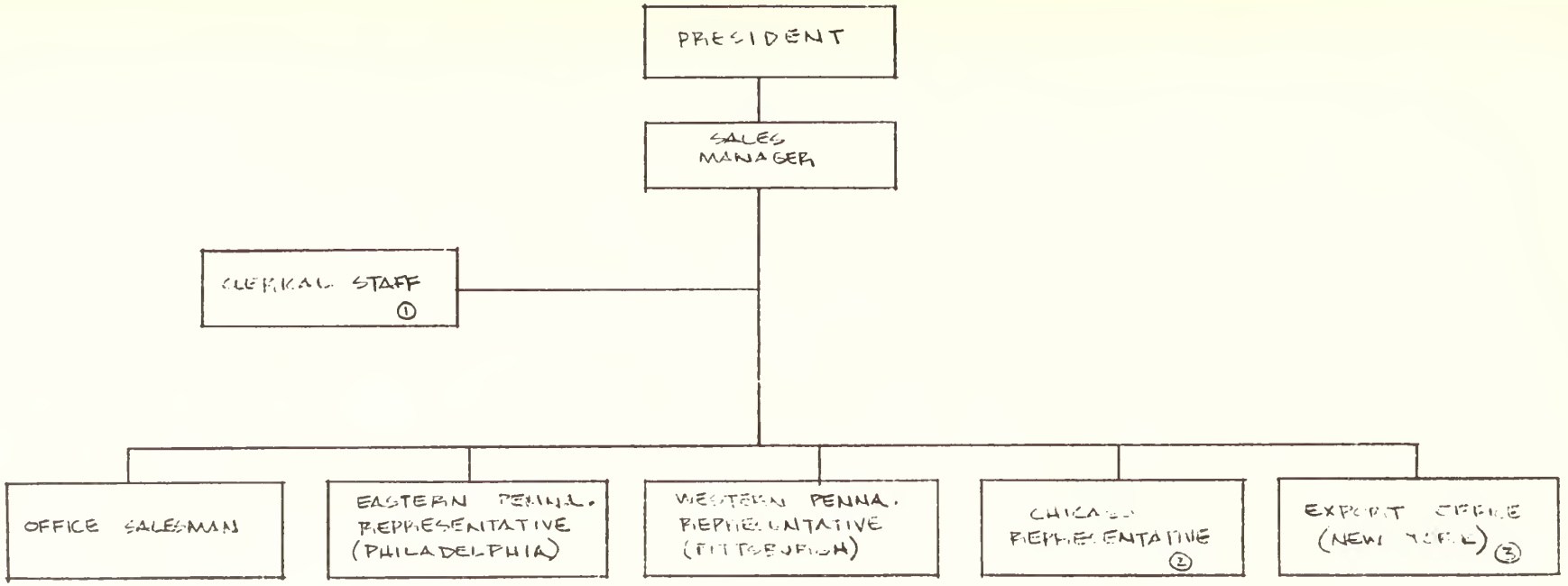
① SHARED WITH PURCHASING DEPT.

② NON-EXCLUSIVE REPRESENTATIVE

③ ALSO HANDLES BLDNG. ENG. CORP'S STRUCTURAL STEEL PRODUCTS FOR EXPORT.

FIGURE 1-5

INFORMAL ORGANIZATION OF THE SALES DEPT. SIMMONS MACHINE TOOL CORPORATION



① SHARED WITH PURCHASING DEPT.

② NON-EXCLUSIVE REPRESENTATIVE

③ ALSO HANDLES BLIND PAC. CORP'S STRUCTURAL STEEL PRODUCTS FOR EXPORT.

FIGURE 1-5

INFORMAL ORGANIZATION OF THE SALES DEPT. SIMMONS MACHINE TOOL CORPORATION

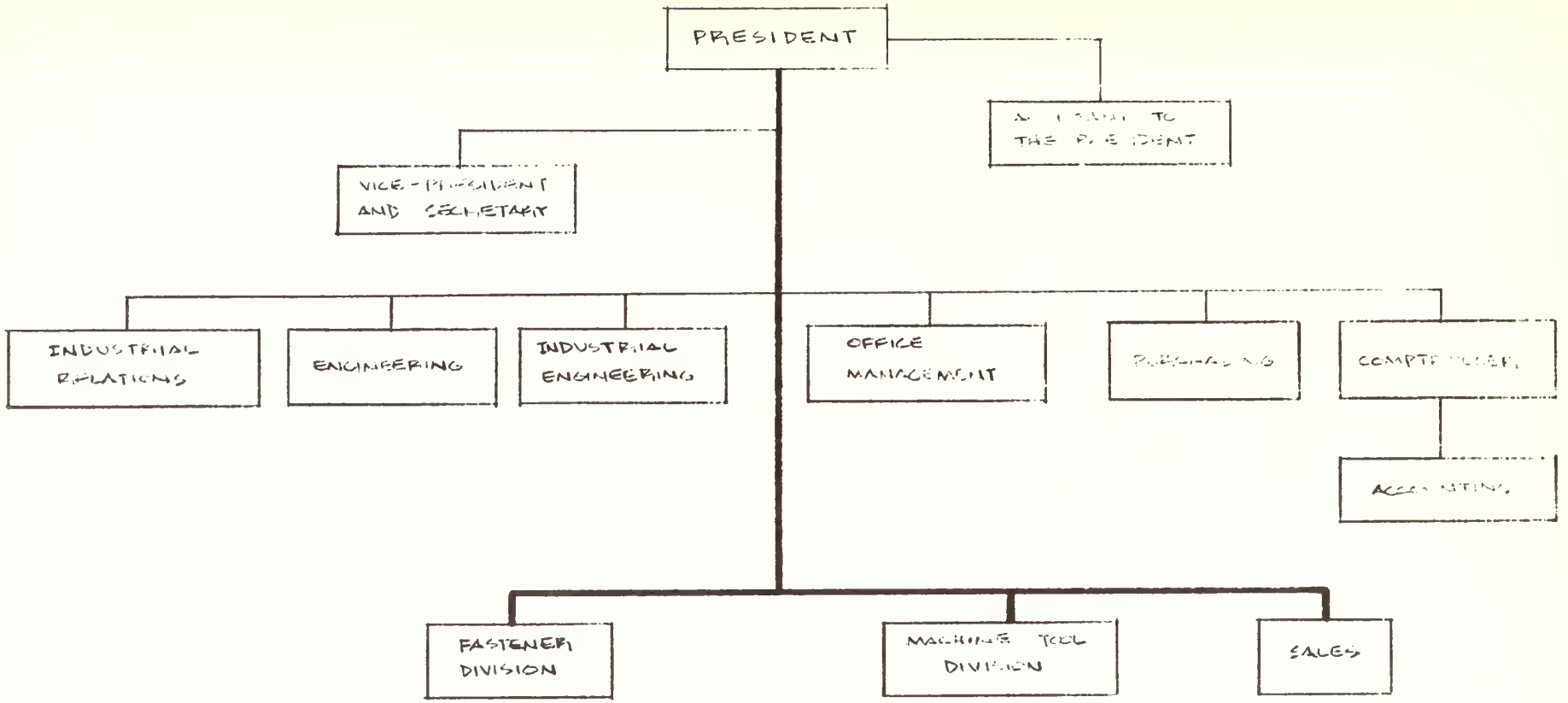


FIGURE 1-6

PROPOSED ORGANIZATION FOR THE SIMMONS MACHINE TOOL CORPORATION

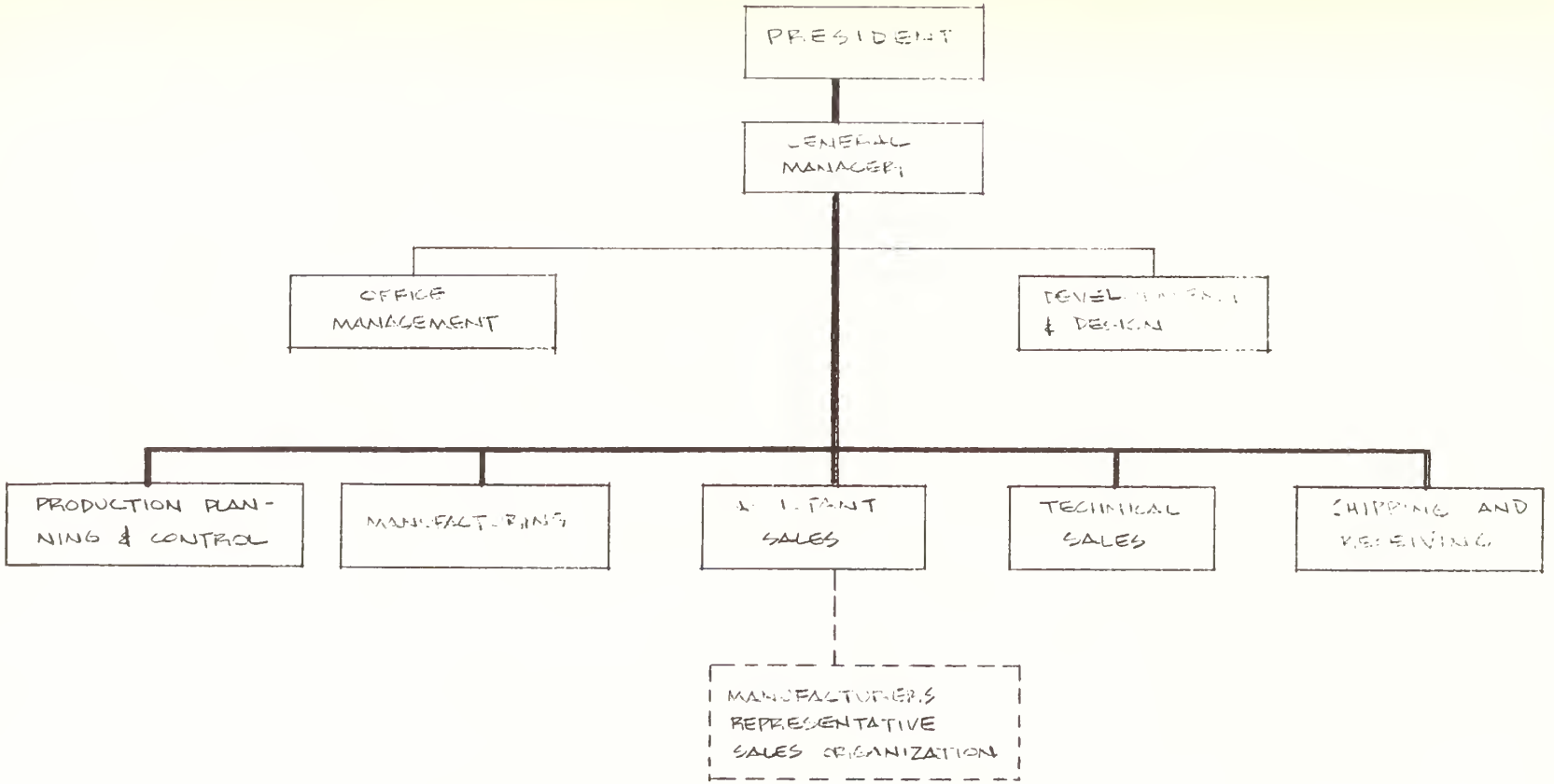


FIGURE 1-7

INFORMAL ORGANIZATION OF SIMMONS FASTENER DIVISION

FASTENER DIVISION

OFFICE ORGANIZATION CHART

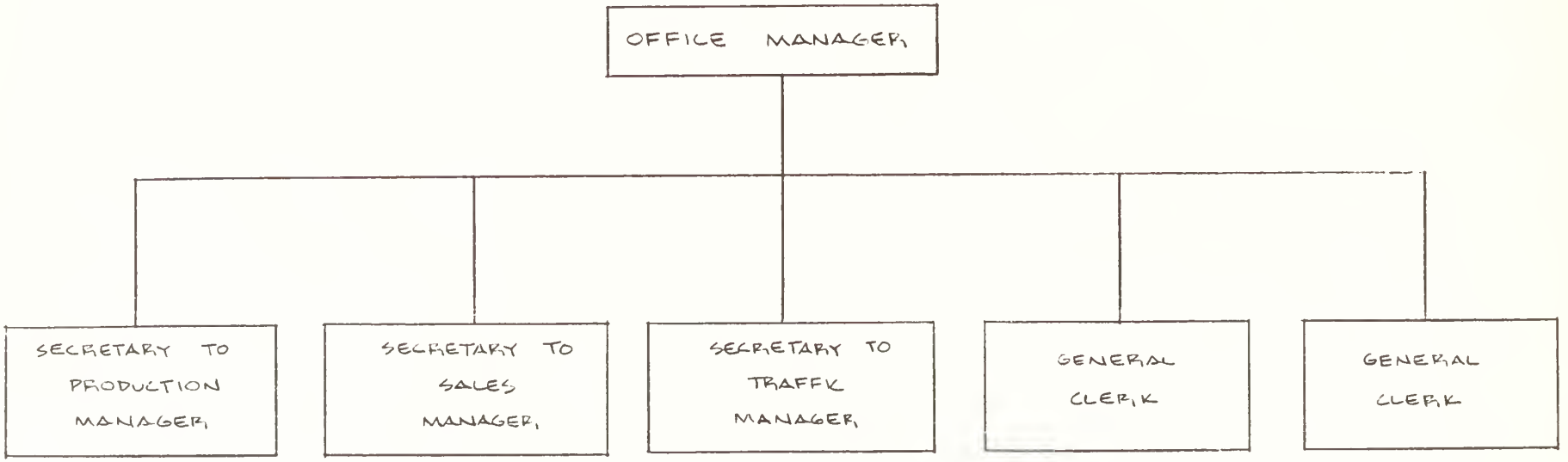


FIGURE 1-8

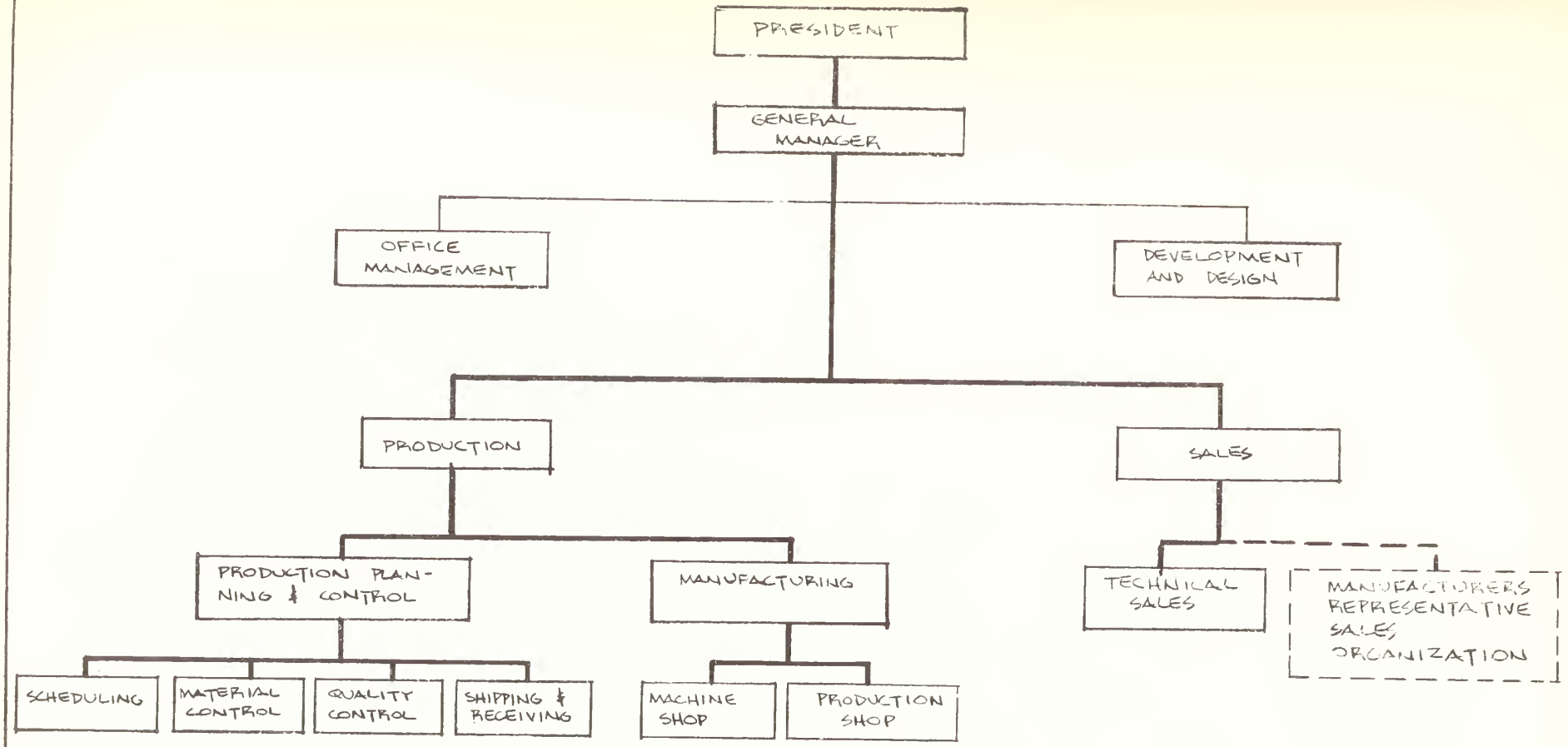


FIGURE 1-9

PROPOSED ORGANIZATION FOR THE FASTENER DIVISION

CHAPTER 2 - INDUSTRIAL RELATIONS

2.1 General. The term "Industrial Relations" is considered to include both those functions of Labor or Union relations, and Employee relations or Personnel Management. Of these, Personnel Management is considered to be the major function of the Industrial Relations Department in the Simmons Machine Tool Corporation.

For a number of years, the Personnel Department had operated under the direction of a full-time, qualified and experienced Personnel Director. About two years ago, for economy reasons, this individual was separated from the company. Since then, the personnel functions have been carried out, in a limited manner, primarily by one individual who has other demanding duties.

There is no Industrial Relations Department. Limited functions within this definition are performed by the Personnel Department. The Personnel Department of the Machine Tool Corporation handles personnel functions for all Simmons enterprises.

The Personnel Department consists of two individuals, the Personnel Director and his assistant. The Personnel Director has primary duties in Internal Auditing, and his duties in the Personnel Department are limited to that of a supervisory nature. Only a small portion of his time is devoted to Industrial Relations. He answers directly to the President. The majority of personnel functions, which are of a routine nature and for which decisions can be made based on fixed policy, are handled by his assistant.

The assistant to the Personnel Director is also secretary to the Chairman of the Board. However, her efforts are primarily devoted to personnel functions. As such, she carries out the following:

1. Preliminary interviewing for hiring. Maintains applications on file.

2. Prepares and processes all insurance applications and claims, and decides on eligibility of claimants.

3. Maintains employment records.

4. Prepares State and Federal Labor and Employment forms and reports, monthly and annually.

5. Handles apprenticeship forms and records.

6. Provides limited employee counselling.

7. Handles union grievances and complaints, making settlements where possible, otherwise passing them on to the Director of Personnel and ultimately to the President.

8. Handles requests for wage classifications or reclassifications and change of rate requests, making decisions where policy is clear, otherwise passing requests to the Director of Personnel or the President.

9. Maintains Seniority lists.

10. Carries out all existing functions of Industrial Relations at the preliminary management level.

11. Maintains time cards.

12. Maintains employee files and records.

2.1.1 Major Personnel Categories.

Hourly Rated Employees. Hourly rated employees are those factory employees comprising the bargaining unit. Throughout this report they are referred to as "shop" or "factory" personnel, the terms being synonymous. Shop foremen and supervisors are not included herein.

Non-exempt Salary Employees. Non-exempt salary employees are the office workers, generally clerical, who do not meet the requirements for exemption from overtime payment under the Fair Labor Standards Act and the Walsh-Healy Act. Throughout this report they are referred to as "office" personnel.

Exempt Salary Employees. Exempt Salary Employees are salaried employees meeting the requirements for exemption

from overtime payment under the above-named acts. Shop foremen and shop supervisors are considered to be in this category.

2.2 Union Relations.

2.2.1 Union Contract. A bargaining agreement exists between Simmons Machine Tool Corporation and Federal Labor Union No. 23981, affiliated with A.F. of L. and C.I.O. This is in most respects a typical and comprehensive bargaining agreement and will not be detailed in this report. The agreement, covering factory employees only, at present embraces both the Simmons Machine Tool Division and the Fastener Division. The agreement is re-negotiated annually in March, and at the time of this study re-negotiations were underway. It was expected that as a result of bargaining, the new union contracts would result in separate agreements for both the Machine Tool and Fastener Divisions.

2.2.2 Collective Bargaining. Collective bargaining is conducted by a shop committee and a management committee. The shop committee consists of eight individuals, seven employees from both the machine tool and fastener divisions, and the Union representative who is not an employee. The management committee consists of the President of Simmons Machine Tool Corporation, the General Manager of the Fastener Division, and the Personnel Director. The shop committee is elected by union personnel, and by virtue of being on the committee gain certain privileges as concerns seniority and layoffs.

Grievance procedures and arbitration will be discussed further in this chapter, under Employee Relations.

2.3 Fringe Benefits. Fringe benefits are limited. There is no bonus plan, no employee associations other than Union Committees, no termination pay, educational assistance, or personnel or legal counselling.

There is no pension plan of any sort. Preliminary investigations as to the feasibility of adopting a pension plan revealed the establishing of a pension plan under present conditions was impractical due to the following age problem:

> More than ten percent of employees are over 65 years old.

More than twenty-five percent of employees are over 60 years old.

The average age of shop personnel is more than 55 years.

Among fringe benefits afforded the employees are the following:

2.3.1 Group Insurance. Group insurance includes life insurance, hospital, surgical and major medical payments for both employees and dependents. This is available for all personnel, being required by union agreement for factory personnel, and being optional for others. Both the employee and the company contribute to this plan. Proportional contributions by employees vary from factory and office employees to executive and administrative personnel. One feature of this plan is that the company will pay all costs of group insurance for any employee who becomes sick or disabled after completing twenty years of service or who voluntarily retires after attaining the age of 65.

2.3.2 Vacations. Factory employees under the union agreement are entitled to holidays with pay, dependent on length of service. Generally speaking, an employee with six months service receives three days paid vacation, those with one year's service receive one week's paid vacation, employees with three years service get two weeks' paid vacation, and so on, with the maximum of four weeks' paid vacation going to employees having more than twenty years' service.

Office personnel are entitled to one week's paid vacation annually after one year's service, and thereafter two weeks' annual paid vacation.

2.3.3 Holidays. Factory employees covered in the union agreement get nine paid holidays annually, including Election Day and a Roving Holiday. Other personnel are entitled to six paid holidays, which do not include Election Day, Thanksgiving Friday, or a Roving holiday.

2.3.4 Sick Leave. Union employees are entitled to leave-of-absence of three months without pay while unable to work because of sickness or disability, and female employees are

entitled to ten months of maternity leave-of-absence without pay. During these permissible absences they accumulate seniority. There is no clear-cut policy concerning sick leave benefits for office or management personnel. At present, they are not entitled to any sick leave benefits, although employees with over 5 years service are usually granted up to five weeks sick leave with pay.

2.3.5 Cafeteria. The company operates a cafeteria which is centrally located. The cafeteria is operated by an outside concessionnaire, from whom the company receives a percentage of sales. The cafeteria is also open to outsiders, who make up a large percentage of the total customers. The cafeteria is not patronized extensively by company personnel, particularly hourly personnel. Personnel who carry their lunches are not permitted to eat in the cafeteria.

Discussion. In-plant feeding is regarded by most concerns as an employee service, and operated on the basis of mutual benefit to both employees and employer. If, for some reason, employees are not taking full advantage of in-plant feeding facilities, then it is obvious that the in-plant feeding program is not achieving its purpose since it is assumed that the Company is not primarily interested in operating a restaurant solely as a profit-making enterprise. It is believed that one main reason why the cafeteria is not patronized more heavily by company employees is the high prices.

It is suggested that the cafeteria operation be examined, with the aim of establishing prices at a level that will be attractive to employees but at the same time permitting the Company to operate on a break-even basis without requiring subsidizing. This should be possible, since the cafeteria is open to the public, and a large percentage of sales are made to non-employees.

It would not be very practical to charge an outsider one price and charge the company employee who is next in line a lower price. One method of accomplishing the above would be to issue cash register slips to an identified employee when he pays his check. The employee would accumulate these receipts and turn them in at intervals to the cafeteria supervisor for a cash refund based on cafeteria profits remaining after operational expenses have been met. Investigation would probably reveal other and perhaps better methods of accomplishing the above. Employees who carry their lunches should be encouraged to

eat in the cafeteria regardless of whether they make a purchase there.

2.3.6 Miscellaneous Fringe Benefits.

A. While there are no employee beneficial organizations or credit unions, the company does maintain arrangements with certain local retail stores who grant employees discounts of from ten to twenty percent on purchases.

B. Male shop personnel are required by the company to wear shop coats or coveralls which are furnished and laundered by the company.

C. Safety goggles are furnished to all personnel who are required to use them when performing appropriate jobs.

2.4 Communications. The primary means of communication within the company is by Bulletin Boards, and orally through the chain of command.

Bulletin Boards are maintained under the supervision of the various shop foremen and supervisors. Notices of layoffs, changes in policy and procedures, work schedules, and other communications, many of a random nature, are posted here. No one person is responsible for the material posted on the various bulletin boards. As a result, the boards are not well organized, and contain material that in many cases is out-dated and inappropriate.

There is a definite and noticeable lack of cummunication between individuals, particularly in supervisory levels and above. In some areas both horizontal and vertical communication are practically non-existent. The "grapevine" is responsible for dissemination of information to employees to a large degree, in all levels of the organization.

There are no company publications, instruction handbooks, written policies, employee indoctrination instructions, or handbooks for foremen or supervisors. There is no suggestion system.

Discussion. Morale appears to be low throughout all levels of the organization, particularly in the Machine Tool Division. Many factors contribute to this, some of

which are touched on in various portions of this report. However, a factor that most adversely affects morale appears to be the lack of communications throughout the organization.

Many people are uninformed concerning current information and planning in other departments that directly affect them. Information of vital importance to employee morale is apt to reach the individual in distorted fashion through the grapevine, or through an article in the local public newspaper or radio.

In part, this can be laid to the type of organization under which the Company operates. Control in the Simmons Machine Tool Corporation is completely centralized. Over the years the Company has expanded, branched out into widely diversified product divisions, and the span of control now is greater than one man can directly control by himself, regardless of ability. The President can no longer devote a portion of his day to circulating around the shops and offices. He is not able to maintain direct contact with all employees. The effective two-way informal communication system that formerly existed is no longer in effect; in fact, there is not now even an effective one-way, or downward, communication system.

Communications are not only affected by vertical blocks, in many areas they are blocked horizontally also. The President maintains direct control of all departments, and authority is delegated only for the most routine matters. As a result, department heads who should be working closely together are in some instances separated by a wall of silence.

One method of attacking this problem would be to secure the services of an outside consultant. This is an expensive method, and has two main disadvantages:

1. It would take considerable time for an outsider to become familiar with all the factors of the situation, plus tying up the time of supervisors and management personnel who would be required to work with him and assist him in becoming familiar with the organization and its functioning.

2. Regardless of how good a program the consultant sets up, his interest ceases when he leaves, and a full-time company executive is required to implement the program.

Probably the most feasible method of handling this problem would be for the Company to install a full time Industrial Relations Director, qualified by training and experience, reporting directly to the President and with authority fully backed by the President. In addition to the many duties and responsibilities required of him as Industrial Relations Director, one of his main objectives would be to assist management in the establishment of better internal communications and consequent employee relations.

The program would require considerable study and a very gradual implementation. The full scope of the program is beyond the discussions contained in this report. The ultimate aim of the program is the establishment of a positive and natural communication system backed by the encouragement of management, providing for a rapid and undistorted flow of information both up and down the chain of command. While the "grapevine" will always be present, and a desired part of the communication system, foremen and supervisors should have rapid and accurate information so they can correct rumors and inaccurate reports that are natural products of the "grapevine".

It is considered that most if not all of the following will require consideration in the successful achievement of the program. These, and the other discussions and recommendations throughout this report, are not solutions to the problem, they only touch on the general situation.

A. A written statement of company policies.

B. A new-employee indoctrination pamphlet.

C. A personnel handbook.

D. A new-employee indoctrination program.

E. Place a responsible person in charge of bulletin boards. Clean them up and ensure that only timely and appropriate material is posted.

F. Utilization of committees and the "communication unit" whenever possible on all levels for exchange of information and discussions of plans and problems.

G. Install a suggestion system.

H. Written job and position descriptions for each and every job in the organization, up to the President, and sufficient delegation of authority to enable supervisors and management personnel to carry out required functions.

2.5 Wage and Salary Administration.

2.5.1 Job Descriptions. Several years ago a partial set of job descriptions were prepared for shop employees by the union agreement. Recently this set of job descriptions was reviewed and brought up to date, and job descriptions have been prepared for all hourly personnel. There are no job descriptions for foremen or supervisors, for office personnel, or for administrative or executive personnel.

The present job descriptions were originally prepared for the purpose of assisting in wage setting, and are used primarily for that purpose.

Discussion. While job descriptions are essential in wage setting and for labor procurement, they are required in order to serve a number of other purposes. Job descriptions detail responsibilities, authorities and requirements of individual jobs. Thus, the individual has a clear picture of his job as centered in the company and supervisors can see individual jobs and their vertical and horizontal relationships. Whether written or not, job descriptions always exist for all jobs. A difficulty exists when descriptions are not written and kept up to date, and confusion results because each individual has his own understanding of what job requirements and responsibilities are. Satisfactory job descriptions cannot be written by one individual, and cannot be written over night. Good job descriptions are the result of group effort, preceded by thorough job analysis. Job analysis and job descriptions must be concerned with jobs only, and not with particular persons holding them. Job descriptions colored by the personality or special skill of a given employee will prove a source of trouble in the long run.

Existing job descriptions were compiled for wage setting purposes only, and were not preceded by very extensive analysis. It is suspected that some of the descriptions were written in part to reflect the actual abilities of the individuals holding the jobs, rather than describing the actual job requirements.

2.5.2 Wage-Salary Setting.

A. Hourly Personnel. The present rate structure is the result of informal rates established years ago, and adjusted periodically to meet varying requirements. Rates are established as the result of union-management agreement, and changes in rates are based on adjustments to former rates.

There are a total of twenty-five job classifications. For these, there are twenty-one pay grades. Each grade has a published high and low rate range. Within this range personnel are distributed according to the judgment of the shop supervisors. A new employee is given a wage within a specific job range according to his experience or ability, as judged by the supervisor. Advancements within the wage ranges are granted when recommended by the shop supervisor and approved by top management. There are no automatic seniority or merit raises. When across-the-board raises are negotiated by union-management agreement, the entire range of all jobs are adjusted accordingly.

The rate-ranges were first established in order to comply with the requirements of the Wage Stabilization Board during World War II. Since then, adjustments to rates and ranges have been purely by individual judgment confirmed by union-management agreement.

While the high-low points of rate ranges are intended to be restrictive, there are instances where individuals have been granted raises which resulted in their wage being above the high point of the rate.

B. Office Personnel. There are no specific rates for the various grades of office personnel, and no set ranges for the applicable existing rates. All wages and wage increases are commensurate with ability as judged by supervisory personnel. There is no system of grading, no minimum hiring wage standard, no automatic or merit increases. Personnel are usually hired at the going market rate for the type of labor required, and thus beginning rates fluctuate with the labor market. Occasionally when the labor market is tight it will be necessary to pay a higher starting wage to new office employees than their contemporaries or immediate superiors are receiving.

C. Administrative-executive Personnel. There are no set salary ranges. Administrative and executive personnel are hired directly by top management, by indi-

vidual agreement and raises and adjustments are determined in the same manner. Foremen and supervisory personnel rates are established in the same way.

Discussion. The present wage structure has developed haphazardly over the years, and has resulted in a wage plan that has no particular objective as its foundation, and no firm or recognized principles on which a wage program can be administered. As previously stated, there are twenty-five separate hourly jobs defined in present job descriptions. When these are grouped in ranking order, a total of twenty-one wage grades or classes are evident. (In this ranking, any rate which differs in either high or low wage range point is considered to be a separate grade, i.e., two rates which have the same low point but differ in high point values are considered to be in two different grades.)

Figures 2-1 and 2-2 show graphic representations of the hourly wage structure. In both these graphs, the ordinates, or vertical values, represent percentages of wages based on the highest point of the highest wage rate - in other words, the highest hourly paid rate among hourly employees is equivalent to 100% on the vertical scale. All other rates are expressed as a percentage of this highest rate.

Figure 2-1 shows pay grades arranged in ascending order, measured from the low point of each grade. Both low and high points for each grade are plotted.

Figure 2-2 shows the same twenty-one pay grades, again arranged in ascending order, but this time arranged in ascending order of mid-point values. Both high and low points for each grade are again plotted. The grade numbers are the same as in Figure 2-1, but the order is changed due to the repositioning of the grades according to ascending midpoint values, as represented by the solid line plotted through the middle of the grade ranges.

It is evident from an examination of these graphs that hourly rates have been set individually and with little or no relation to each other, and the relationship of wages and job requirements are not taken into consideration.

Increasing numbers of firms of all sizes have found that a formal job-evaluation procedure can reduce wage inequalities to a minimum and form the basis of a wage structure that will attract and hold high-grade em-

ployees and that will be regarded by union and management as being fair and equitable.

There is a wealth of literature and reference material on this subject and it is not considered necessary at this point to discuss the subject in detail, nor to recommend specifically any of the various job evaluation methods. Prerequisites for the establishment of an effective job evaluation system include:

A. Job analysis to be conducted on all jobs in the organization.

B. Existing job descriptions to be reviewed, and job descriptions be prepared for each job in the organization.

C. After a careful and detailed description and analysis have been prepared for each job, a method of formal evaluation be used to determine the relative compensation of all hourly and office jobs. Consideration should later be given to extending job evaluation to salaried jobs.

D. AFTER a wage structure has been established and placed into effect based on job evaluation, it must be reviewed periodically and maintained up-to-date.

2.5.3 Area Wage Survey. The company does not participate in an Area Wage Survey, and does not receive reports published by participants in the local Area Wage Survey. Periodic data published by the New York State Department of Labor is available but not regularly consulted.

2.5.4 Rate Changes and Adjustments.

A. Hourly Personnel. There are no provisions for automatic seniority advancements, and no merit-rating system.

Requests for individual rate changes or adjustments usually originate with the individual. There is no definite basis or policy for originating or granting wage increases or adjustments, and requests are made through the grievance system. When an employee feels that he is deserving of a raise by virtue of seniority or productivity

or for other reasons, he fills out a grievance slip, stating his request and the justification. This grievance then goes through the following channels:

1. To the Union Steward, who forwards it to the Shop Supervisor.

2. The Shop Supervisor forwards the grievance to the Personnel Department, where applicable data is supplied: length of service, attendance remarks, present pay grade, number of raises granted, etc.

3. The grievance then goes back to the Shop Supervisor, who recommends approval or disapproval based on his personal judgment.

4. If the request has been approved by the Shop Supervisor, it goes to the President for final approval:

   A. If the request has been disapproved by the Supervisor, it is normally turned down by the President.
   B. If the request has been approved by the Supervisor, it is usually approved by the President.

5. If disapproved by the President, the request then goes back to the Union, with the reason for disapproval explained. Theoretically, after a grievance has been turned down three times, the grievance then goes to arbitration. However, there is no record of such requests ever going to arbitration.

B. Office Personnel. Office personnel roughly follow the same procedure as hourly employees, except their requests do not go through the union and do not receive union backing. There are no standards or criteria for granting individual wage adjustments other than the recommendations of supervisors and final approval or disapproval by the President.

C. Administrative-Executive Personnel. All salary adjustments and increases are a matter of individual bargaining between the employee and top management. Foremen and supervisors are in this category.

Discussion. There are no standards or recognized policy for wage increases or adjustments. Across-the-board adjustments are negotiated periodically by union-management agreement, but the individual is solely on his own when it comes to receiving recognition for his services, and it is expected that often the individual who is most vociferous and aggressive receives increases, rather than the deserving individual. In such a system, it is difficult for a supervisor to be fair, and it is impossible for him to prove that he is being fair. The resulting lack of consistency has an adverse effect on morale and personnel relations.

Formal employee-rating plans, or merit rating systems, have been developed to reduce the element of favoritism and snap judgment in personnel decisions, and to provide uniformity in rate adjustment procedures and understanding on the part of both workers and supervisors in an organization. These merit rating plans are widely used by government agencies and in private industry.

The principal advantages of a good employee-rating system may be outlined as follows:

1. It provides for uniform and systematic judgments by supervisor of the performance and conduct of each employee over a period of time, in advance of the need to make decisions concerning these employees. The necessity to rate his employees forces the supervisor to think more carefully about their work, thus avoiding snap judgments. This is probably the greatest value in a systematic rating plan.

2. It gives supervisors a record of progress or difficulties, which they can discuss with each employee, commending good work, pointing out difficulties or deficiencies, and suggesting possibilities for improvement. This is in addition, of course, to the daily contact which a good supervisor has with his men.

3. It provides comparable information that can be used as one basis for selecting employees for promotion or for individual merit wage or salary increases, and, where performance is a factor to be considered, in selecting employees to be retained in downgrading and layoff.

Consideration should be given to the development of a merit rating program which, in conjunction with a job evaluation program, will assist in eliminating the unde-

sirable elements of the present promotion and wage adjustment system. No discussion of the various types of merit rating systems is given here, as it will be necessary to develop a particular plan for this company only after thorough study of existing references and company conditions. Complicated plans should be avoided, and personnel training will be necessary in order to carry out the program successfully.

2.5.5 Labor Turn-Over Rate. An attempt was made to analyze the labor turn-over rate in the past two years with the aim of determining if the rate compared favorably or unfavorably with published figures for comparable industries. It was difficult to arrive at a definite conclusion due to several limiting factors.

First of all, the company had experienced an overall reduction in force of some 36% of the working force during the past two years: an 11% reduction in 1957, and a 25% reduction in 1958. This large reduction in force introduces a factor that tends to make meaningless any computed labor turn-over rate.

Secondly, it was impossible to locate turn-over figures for a comparable industry. Published data originated by the U.S. Department of Labor and the New York State Department of Labor are broken down into specific types of industries, while figures reported by the Simmons Machine Tool Corporation, combining data on the several divisions which do different types of work, are actually representative of no one particular type of industry. While no exact conclusion was reached, it is believed that labor turn-over for the two year period for the entire Simmons Machine Tool Corporation is at least equal to, and probably higher than for a comparable industry. This conclusion is supported in part by the following figures for Simmons Machine Tool Corporation, adjusted for the reduction in force described above:

> The computed annual labor turn-over rate for all employees in 1958 was 20%. The computed labor turn-over rate for women employees was 46.7%.
>
> The computed annual labor turn-over rate for all employees in 1957 was 37%. The computed annual labor turn-over rate for women employees during this period was 43.6%.

Further breakdown of separations over this two-year period (1957 and 1958) show the following:

	VOLUNTARY (Quit)	ENFORCED (Fired)
Hourly Employees	42%	58%
Office Employees	22%	78%
Exempt Employees	43%	57%

Primary reasons for voluntary separations: (Total: 30%)

1. To accept better job - - - - - - - - - - - - - - - 9%
2. No reason given - - - - - - - - - - - - - - - - - 4%
3. Family reasons - - - - - - - - - - - - - - - - - - 3%
4. Illness - 3%
5. Miscellaneous, including: - - - - - - - - - - - 11%
   - Return to school
   - Moving from area
   - Pregnancies
   - Work too hard
   - Military service
   - Retired
   - Leave of absences terminated - failed to return to work

Primary reasons for enforced separations: (Total: 70%)

1. Laid off - slack work - - - - - - - - - - - - - - 31%
2. Job completed - - - - - - - - - - - - - - - - - - 11%
3. Absenteeism - - - - - - - - - - - - - - - - - - - 7%
4. Unexplained - - - - - - - - - - - - - - - - - - - 10%
5. Miscellaneous, including: - - - - - - - - - - - 6%
   - Not reliable
   - Labor agitator
   - Disability
   - Transfer to other divisions
6. Not qualified - - - - - - - - - - - - - - - - - - 5%

Discussion. The above figures are interesting if further analyzed:

A. Although the company was experiencing a steady over-all reduction in force, the labor turn-over rate was fairly high (average or above). During a period of working force reduction, accompanied by a surplus labor market, labor turn-over would normally be expected to be low.

B. In this two-year period the labor turn-over of the entire working force (in numbers) was almost 95% including the reduction in force; excluding the reduction in force the turn-over rate was 57%.

C. Of the hourly employees who were separated, 42% quit; of the exempt employees who were separated, 43% quit.

D. Of all separations, both voluntary and enforced, at least 35% were due to dissatisfaction on the part of either employee or employer.

9%	- quit to get better job
4%	- quit with no reason given
7%	- were fired for absenteeism
10%	- were fired for unexplained reasons
5%	- were fired for being unqualified
Total 35%	

To this figure, at least a portion of the 11% who quit for miscellaneous reasons and some portion of the 6% who were fired for miscellaneous reasons could be added. But, the minimum figure of 35% of separations can be accepted as being for reasons of dissatisfaction for one reason or another, and these reasons can be regarded as controllable factors. This is in contrast with the remaining 65% who were separated for reasons accepted as being beyond control of the company.

No figures are available for the actual cost of labor turnover in the Simmons organization, but for comparison purposes, actual case studies in comparable industries indicate that costs run from $50 to $450 per individual, with the estimated cost of labor turnover for hourly rated employees of a boiler manufacturing company being $96.00 per worker replaced. (1945 study).

Labor turnover is not always bad. Labor turnover promotes company stability insofar as such circulation of employees brings new blood into the organization. The company remains a "going concern" in regard to personnel as long as employees who leave for reasons of age or health are replaced by younger or stronger employees. Moreover, efficiency and morale are raised when necessary management replacements can be supplied by promotions from within the organization rather than from outside the company.

One cannot say, however, that the Simmons organization is benefitting by improvement of company stability insofar as the labor turnover rate is concerned: rather, with the average age of employees being so far above normal as discussed previously, it would seem as though labor turnover has succeeded in the opposite - in having younger personnel drained off, instead of infusing new blood into the company.

It is axiomatic that the company would benefit if any condition that contributed to labor turnover could be identified and improved, either by management or by the cooperation of management and workers.

This problem can be attacked from the angle of learning, if possible, answers to the following questions:

A. Why are employees voluntarily leaving the company?

B. What kind of employees are leaving voluntarily?

C. Other than by reason of reduction of work load and cut-back, why are workers being fired?

One simple and inexpensive method of obtaining these answers, in part, would be by exit interviews. Once the answers are obtained, action can be commenced to eliminate the causes.

2.6 Employee Supervision.

2.6.1 Status of Foremen, Supervisors. There are no written policies, instructions or manuals for foremen and supervisors. All authorities and responsibilities are as deter-

mined by custom, individual initiative, and orders passed on through the chain of command.

Machine Tool Division, (Factory Supervision). Overall supervision in the Machine Tool Division rests in the Shop Superintendent. He carries out the duties of General Manager of the division, and reports only to the President.

The Shop Superintendent in his division has unlimited authority, subject to veto only by the President. He can hire, fire, discipline, adjust rates, and has a high degree of autonomy in the actual operation of the shop. He is responsible for all operations in the machine shop, including production planning and control, employee relations, equipment maintenance and janitorial work in the machine shop, and shipping and receiving. He determines the need for overtime work, and takes care of preliminary internal inventory requisitioning.

The shop foremen are only concerned with on-the-job supervision, and have limited authority. They make recommendations to the Shop Superintendent concerning rate adjustments, transfers, disciplinary action, etc.

Fastener Division, (Factory Supervision). Two supervisors, who report to the General Manager through the Plant Superintendent, have roughly the same status as the foremen in the Machine Tool Division. The General Manager's authority and responsibility in the Fastener Division correspond to those of the Shop Superintendent in the Machine Tool Division, except that he has more authority and autonomy and is subject to veto by the President only in major matters.

Machine Tool Division, Office Supervision. Supervision of office employees lies in the Office Manager, who is responsible for the functioning of three sub-divisions:

General office personnel
Stenographic-duplicating
Records-files-telephone

The Office Manager exercises preliminary and limited authority for hiring, firing, wage adjustment, etc., but all actions require approval of the President.

Fastener Division, Office Supervision. Supervision of office personnel is carried out by the General Manager, assisted by an Office Manager who is also his secretary.

The General Manager has complete autonomy in all matters concerning office personnel, including hiring, firing, wage adjustments, discipline, etc.

2.6.2 Ceilings. There are no established employment ceilings. Any supervisor is empowered to initiate employment requisitions.

2.6.3 Recruiting.

Exempt Personnel. Administrative and executive personnel are hired directly by the President. Most exempt personnel are individually recruited through personal contact or by direct knowledge of the individual's experience and capabilities.

Office Personnel. Office personnel are normally recruited through employment agencies who specialize in clerical placement.

Hourly Personnel. Factory personnel require little recruiting in normal times. There are usually sufficient applications on file to fill requirements. If jobs are open and applications are not on file for the opening, recruiting is done through the local branch of the U.S. Unemployment Service. Occasionally it has been necessary to resort to newspaper advertising to fill skilled openings.

2.6.4 Hiring. When hourly or office personnel are required in a department, the supervisor makes application to the Personnel Department, either orally or in writing, describing the job requirements. After the individual is recruited, he is given a preliminary interview in the Personnel Department and directed to the requisitioning supervisor. The hiring decision is dependent upon the judgment of the supervisor. No written or performance tests are given, all evaluations being made on the basis of the interview and stated prior experience.

Interviewing and Preliminary Processing. Job applicants for hourly and office jobs are initially interviewed by the Assistant to the Personnel Director. If there are no openings or anticipated early future requirements for the individual, he is discouraged but not refused permission to file an application. An application form is

filled out in longhand by the applicant, and is filed in the original. No typed copies are made.

If a requisition has been placed by a supervisor that would indicate a possible opening for the individual, he is given a preliminary interview, and the terms of employment and the job description are discussed. No company indoctrination pamphlets or written policies are available. Next, he is directed to the requisitionting supervisor. The supervisor fills in comments on the application form, and hires or rejects the man. The supervisor only interviews applicants when he has indicated to the Personnel Department that an opening exists.

If the individual is rejected, he is informed of the reasons for rejection and his application is retained on file in the Personnel Department.

If the individual is hired, he returns to the Personnel Department for further processing.

Final Processing. After the applicant has been accepted by the supervisor, steps incident to being taken up on the company payroll are conducted by the Personnel Department.

A. The Assistant to the Personnel Director conducts a final interview, answering any questions concerning company policies and terms of employment. The Group Insurance Plan is briefly explained, and a copy of the Insurance plan is given to all employees. Hourly personnel also receive a copy of the union agreement.

B. Three character references are required, along with a record of former employment. These references are contacted by the Personnel Department by form letter. Where speed is essential in hiring, local references are checked by telephone. No checks are made with local agencies or credit bureaus, and no local police file check is made.

C. The new employee is directed to a company-retained physician for medical examination, and instructed when and where to report for work. Starting time is normally sufficiently far enough in advance that the results of the medical examination and reference checks are received prior to the employee commencing work.

4. The Personnel Department concludes paperwork procedures incident to taking up the new employee on the

company payroll and issues a clock number and time card. A history record card is typed up, along with insurance applications and records (when applicable), and a new employee file is started.

Probationary Period. Office and exempt personnel have no probationary periods. Hourly personnel under the terms of the agreement commence employment in a 30-day probationary period, which can be extended to 60 days upon recommendation of the supervisor. The supervisor is the sole judge of whether the new employee is qualified for permanent employment at the end of the probationary period.

2.6.5 Layoff and Discharge.

Discharge. A supervisor or higher level authority may undertake to discharge an hourly employee without notice for cause.

Office and exempt personnel may be discharged without notice and without cause.

Layoff. Office and exempt personnel may be laid off without notice and without cause.

The union agreement contains provisions governing layoff of hourly employees. When layoffs become necessary, an employee of shortest seniority in the division shall be laid off first. In recalling employees from layoff the employee of greatest seniority shall be returned to work first, provided, in the judgment of the Company and the Union, he has the necessary qualifications for the performance of the job.

Separation Interviews. No separation interviews are given. Data concerning the reason for separation is forwarded by the Supervisor to the Personnel Department.

Discussion. Separation interviews are a valuable source of information concerning employee morale and opinions, working conditions, etc., and will be of aid in establishing sounder personnel practices. The employee history card already contains space for the recording of separation interview data.

2.6.6 In-Plant Transfers. There are no expressed policies governing in-plant transfers for office or exempt personnel.

No advance notice of management-directed transfers is required.

Provisions governing in-plant transfers of hourly employees are contained in the bargaining agreement.

Promotions and Job Bulletining. When vacancies occur in hourly jobs, they are posted on the bulletin boards, showing location, title, description, hours and rate of pay. Hourly employees can apply for these vacancies, and seniority has no basis in the determination of the person selected to fill the vacancy. Selection is solely a result of the judgment of the supervisor.

There is no probationary period for in-plant transfers of factory personnel. If the individual is unable to adequately fill the new job, he is removed from the position and transferred back to his old job without penalty.

Bumping. Hourly employees whose jobs are abolished or closed down temporarily due to slack work may exercise their divisional seniority to displace employees with less divisional seniority in jobs which they are qualified to perform in the joint opinion of Management and the Union. An individual can "bump" outside of his job description or classification. In this event, when exercising seniority privileges to "bump down", if the individual is unable to demonstrate qualifications to adequately perform the new job, he is discharged and forfeits all Company and Union rights.

2.6.7 Discipline. There are no policies or formalized procedures for employee discipline. Supervisors normally issue verbal warnings, followed by discharge on the repetition of the offense. However, warnings are not required, and first offenders may be subject to discharge if the supervisor so decides.

2.6.8 Grievances. There are no established procedures for handling grievances of office or exempt personnel.

Procedures for handling grievances of hourly employees are detailed in the bargaining agreement, and follow typical management-union grievance negotiations. Details were discussed previously when describing the use of grievance procedures in rate adjustment requests.

By far the majority of all grievances (estimated over 95%) are concerned with requests for rate adjustments. There is no record of serious grievances ever having been submitted, and no grievances have ever gone to arbitration.

2.6.9 Employee Records. Employee records are maintained by the Assistant to the Personnel Director, in the Personnel Office. Records maintained include, but are not limited to, the following:

Initial job application form file
Results of physical examinations
Reference check replies
Employee history record cards
Insurance records
Clock numbers - time cards - salary records
(as distinct from payroll department records)
Rate ranges and changes
Job descriptions
Seniority lists
Listing of all employees insured under group plan
State and Federal Labor reports
Disability claims and proceedings
Grievance files

2.7 Training and Education. There is no training program as such, and no one person is charged with responsibility for training in the organization or the divisions.

2.7.1 On-The-Job Training. There are no provisions for classroom or formal training, no formalized management development or training, and no professional training.

On-the-job training is limited to actual operating conditions under supervision.

New Employee Indoctrination and Training. New employees are instructed concerning the details of their job, and commence work under the supervision of the supervisor or foreman. There is no indoctrination training, and no indoctrination publications or statements of company policies or rules available.

Apprenticeship Training. The Company is qualified to operate an Apprentice Program in the Machine Tool Division. This is a four-year program, under the sponsorship

of the New York State Apprenticeship Counsel, in which the individual rotates through various shop departments and implements shop training through limited night-school studies in special courses offered at a local high school.

Presently there is one apprentice enrolled in this program.

2.7.2 Off-the-Job Training. The Company sponsors no off-the-job training. There are no adult education courses or special programs offered, and individuals who participate in professional society meetings or conferences do so as a matter of individual initiative and at their own expense.

The Company does not sponsor correspondence courses or other methods of self improvement, but does encourage such outside study to the extent of posting notices concerning correspondence courses and local night-school courses on the bulletin boards. No formal credit or recognition from the company is gained by the individual for completion of such training.

2.7.3 Training Equipment and Services. There is no training equipment or literature available, no counselling services and no personnel testing services.

Discussion. There is a need for a trained and qualified individual to undertake a study of the training requirements of the organization, and to set up and supervise a training program which will embrace the following, in varying detail:

New employee indoctrination
Orientation training
Employee training, on and off the job
Office procedure training
Apprentice training
Supervisory training
Executive development
Safety training for all employees

It is impossible to recommend the degree to which the training program should be developed, or the areas which will require special emphasis. It is not considered that a very elaborate training program is required, but it is considered that a planned program is required.

As a part of determining the training needs, the training director in consultation with the supervisors and department heads should consider the following points:

A. Who is to be trained?

B. What should the over-all training program consist of?

C. Who is to do the training?

D. When, how long, and where the various kinds of training should be given?

One of the first steps in the development of the over-all program should be the publication of a new-employee indoctrination pamphlet, and the establishment of a brief indoctrination program.

2.8 Safety Program. There is no safety program. No one person has been charged with the responsibility for supervision of a safety program. There are no Safety Engineers, and no special safety training is given to supervisors or employees.

Foremen and supervisors are expected to maintain adequate safety standards and practices within their departments. No inspections are made by company personnel, other than on-the-job attention given by supervisory personnel. There is no publicity given to safety requirements other than posters displayed on the shop bulletin boards or posted on the walls.

Mechanical safeguards are installed on machines as required. These are usually installed as the result of recommendations made by insurance representatives who make periodic routine inspections.

Enforcement of required safety practices, such as maintenance of installed mechanical safeguards on operating machinery, is by foremen and supervisors. Since there is no piecework or incentive pay, there is little to be gained on the part of employees who might be interested in by-passing mechanical safeguards to speed up production.

No safety equipment, other than unbreakable goggles, is furnished or required. Safety shoes are not

required in the shop or factory areas. Male employees in the shop are required to wear coveralls and female shop employees are required to wear slacks.

Discussion. There had been an active safety program under the supervision of a safety supervisor until several years ago. Weekly safety meetings and instructions were held, and area inspections carried out regularly. This was discontinued for economy reasons.

It is not considered that this was a good economy measure. While the accident rate is still low enough to enable the company to receive special rates from the insurance company, the present fortunate situation appears to be largely a carry-over from the previous safety program and cannot be expected to continue indefinitely.

A safety director should be appointed, to implement and supervise a continuing safety program. This need not be more than a part time job or collateral duty, but the safety director should be qualified and interested, and it is important that one particular individual be specifically charged with this responsibility. The cost of administering a safety program is negligible, and much free and valuable assistance is available from insurance company representatives and local government agencies.

2.9 Medical Program.

General. For many years the Company maintained a full time nurse in the plant during the day shift, but her services were terminated about a year ago as an economy measure. There is still a centrally located and well-stocked small dispensary.

Training and Equipment. There are no trained First Aid men to handle emergency medical requirements, and there are no emergency First Aid boxes located in accessible areas throughout the plant.

Physician. The Company maintains a physician on retainer. Personnel requiring his attention as a result of plant injuries are sent to his office or they may receive treatment from their own family physician.

All hourly and office personnel are given physical examinations upon hiring, but exempt personnel are not required to take physical examinations. No periodic physical examinations are required of any one.

The Company has arranged for Asiatic Flu shots to be given to all employees at no cost.

Health and Sanitation. No one person is charged with the responsibility of ensuring that adequate health and sanitation standards are maintained, and no inspections to ensure this are carried out.

Discussion. The abandonment of a medical program in an organization of this size is not considered to be a good economy measure. If management does not feel that a full time nurse is justified, then individuals should be given First Aid training so that prompt and effective emergency medical attention could be rendered. There are several free and valuable sources of this training; the Red Cross offers a particularly good course in Emergency First Aid, as do many local Civil Defense Organizations.

Emergency First Aid kits should be located throughout the plant for emergency use, and the services of a nurse or physician should be obtained periodically to inspect medical supplies in the dispensary and First Aid boxes, to remove and replace over-age medicines and keep supplies up to date.

Casual inspections of work areas and washrooms, and comments from employees indicate that health and sanitation measures are in need of improvement. One specific individual should be charged with the responsibility of maintaining adequate health and sanitation standards, and periodic inspections by a member of the management team should be made to ensure that such standards are being maintained.

2.10 Plant Protection. The object of the plant protection measures is physical security, specifically protection against fire and pilferage during non-working hours.

Guard Force. During non-working hours of the working week, watchmen on the Company payroll patrol the plant. Watchmen are not armed or uniformed.

Weekend security is provided by armed and uniformed Pinkerton guards.

Security personnel have no time clocks or stations, arrange their own patrols, and have no immediate supervision. None are deputized.

There are no door or gate guards during working hours.

Civil Defense Participation. The Company does not participate in Civil Defense training, other than mounting posters on walls and bulletin boards. There are no trained personnel or rescue squads, and no emergency equipment is maintained. Shelter areas are not designated. The Company is not connected with the Civil Defense Industrial Warning Network.

2.11 Fire Protection.

Organization. There is no volunteer fire brigade. No one person has been charged with the responsibility for fire protection organization or maintenance of equipment. There is no training or fire drills. Inspections are conducted by representatives of the Insurance underwriters and New York State. All buildings are sprinkler-protected. Sprinklers are operated by fire main pressure, with no reserve system. Automatic fire warning when the sprinklers go into operation is by the constant pressure system.

Discussion. Full reliance is placed on the local fire department. This is a volunteer organization, located about one mile from the plant. The time of response of this fire department can be variable, depending on many factors.

Portable extinguishers are maintained and refilled annually through an agreement with the local fire department. It was noticed that some of the extinguishers were more than six months overdue for annual maintenance.

The Company should organize and train a small volunteer fire brigade, consisting of key individuals in the various departments, who could respond to an emergency and take immediate action while awaiting arrival of the fire department.

Some one person should be charged with the responsibility of fire protection organization, including maintenance of equipment and periodic fire safety inspections.

2.12 Overall Summary of Industrial Relations. The most significant need brought out by this analysis is that of

an Industrial Relations Department under the direction of a full-time, trained and experienced individual. This individual, plus the present assistant, should be able to handle all Industrial Relations functions adequately, and at considerable benefit to the company. Most of the other recommendations contained in this chapter are based on the premise that such an individual is required to carefully analyze, implement and supervise required industrial functions, making such changes as are deemed necessary after careful and considerate study has been made, and as are deemed to be in line with company policies and objectives.

There are two areas that are considered to require most immediate study. One is the very definite lack of communications within all levels of the organization, both on the horizontal and vertical planes. The other is the problem, growing more crucial all the time, that concerns the advancing age of employees and the lack of new blood in the organization at the working levels.

These two crucial areas apply mostly in the Machine Tool Division, but extend to the Fastener Division. In these two divisions there are approximately 90 and 100 employees respectively, or almost 200 employees in all. It is considered that a full time Industrial Relations officer serving an organization of this size is definitely not a luxury, but an essential Management Assistant.

2.13 Recommendations: It is recommended that the Company:

1. Installa full time Industrial Relations Director, qualified by training and experience, reporting directly to the President and with full responsibility for:

   Employee Relations
   Employment Procedures
   Employee Services
   Safety Program
   Wage and Salary Administration
   Training and Education
   Working Conditions
   Health and Sanitation

2. Investigate and improve internal communications.

3. Investigate cafeteria administration with the aim of placing it on a breakeven basis as an employee service.

4. Issue a new-employee indoctrination pamphlet.

5. Set up a new-employee indoctrination program.

6. Issue a personnel handbook.

7. Place a responsible person in charge of bulletin boards.

8. Install a suggestion system.

9. Conduct job analysis and write job descriptions for every job, including office, administrative, and executive personnel.

10. Establish a firm wage structure for all hourly and office personnel through a system of job evaluation.

11. Consider the establishment of a formal Merit Rating system.

12. Remove the procedure of processing requests for rate adjustments from the grievance system.

13. Conduct separation interviews.

14. Investigate reasons for labor turnover rates.

15. Appoint a Training Director (collateral duty).

16. Establish a training program.

17. Appoint a Safety Director (collateral duty).

18. Establish a Safety Program.

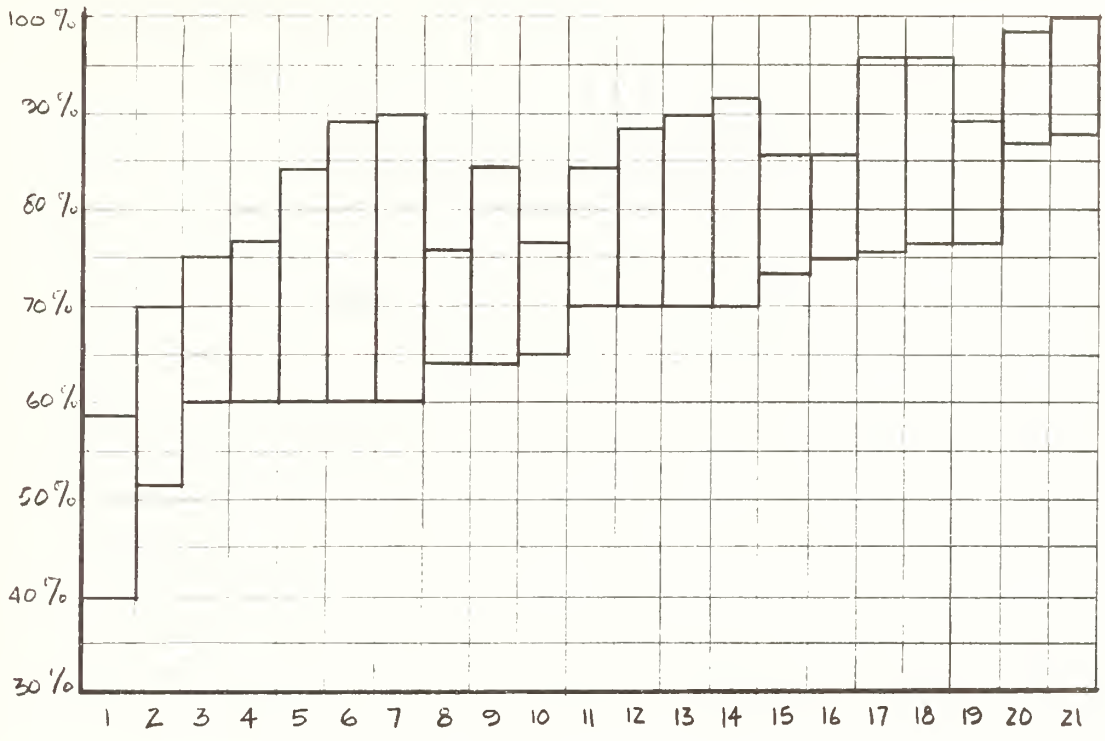
19. Improve the Medical Program.

20. Appoint a responsible individual (collateral duty) responsible for maintenance of Health and Sanitation standards.

21. Appoint a Plant Fire Marshall (collateral duty), responsible for organizing a small internal volunteer fire brigade, maintenance of equipment, and periodic fire safety inspections.

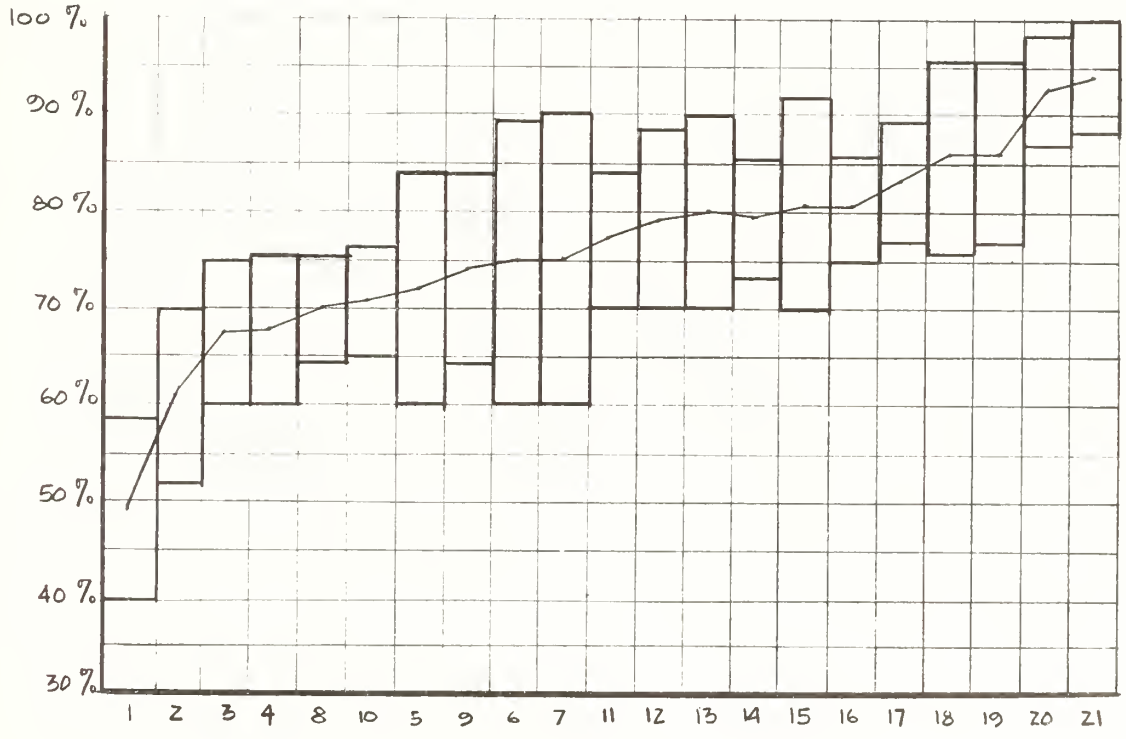
22. Investigate and take steps as necessary to improve the problem of the disproportionate advanced age of employees.

FIGURE 2-1



PAY GRADES IN ASCENDING VALUES, MEASURED FROM LOW POINTS

FIGURE 2-2



PAY GRADES IN ASCENDING VALUES, MEASURED FROM MID POINTS

CHAPTER 3 - PURCHASING, MARKETING AND SALES

3.1 Purchasing.

3.1.1 General. Purchasing for all divisions in the Simmons enterprises is done through one central purchasing department in the Machine Tool Corporation. Purchasing is a separately organized department, consisting of the Purchasing Agent plus clerical assistants. The Purchasing Agent reports directly to the President of the company.

3.2.2 Procedures. With the exception of the purchase of machinery for resale, which is handled by the Sales Manager of the Machine Tool Corporation, all purchase requisitions from all the Simmons enterprises go through the Purchasing Agent. Procedures are as follows:

A. Divisions submit purchase requisitions to the purchasing department. The purchase requisition is a standard form used by all Simmons enterprises. The division concerned includes item specifications or a detailed description of non-standard items and makes recommendations as to vendor if a known or preferred source exists.

B. If necessary, a letter of inquiry is forwarded by the Purchasing Agent to prospective suppliers requesting price and delivery quotations. Inquiries are serialized for identification.

C. Quotations are filed by inquiry serial number and are considered to be "commercial confidential" information.

D. The selection of a vendor is made by the Purchasing Agent on the basis of the price and delivery date required, as stated on the purchase requisition. If questions arise concerning details of either price or delivery date, they can usually be resolved by a call from the Purchasing Agent to the originating division.

E. A purchase order (standard form, original plus four color-coded copies) is issued with copies to the following:

1. Original to the vendor.
2. One copy to the Receiving Department.
3. One copy for Purchasing Department files.
4. Two copies to the requisitioning division.

F. Follow-up action is covered by the Purchasing Department using a tickler file system by delivery dates.

G. Upon receipt of material, it is certified as to quantity and quality by the Receiving Department which stamps its copy and forwards it to the Purchasing Department.

H. The Purchasing Department attaches the original invoice to the purchase order copy and the receiving copy, and forwards all three items to the Accounting Department for payment. The Accounting Department retains all three items for file record after payment has been made.

I. The Receiving Department ensures delivery of the material to the requisitioning division.

3.1.3 Types of Materials Purchased. The general types of materials most commonly purchased break down as follows:

A. Machine Tool Division: a wide variety of metal, electrical equipment, and specialized items as called for by each job.

B. Fastener Division: wire, sheet steel, and coiled steel strip.

C. Simmons Industries: structural steel, sheet steel, and electrical equipment.

D. HMC Corporation: janitorial supplies and maintenance and operating materials.

E. Sim-Par Corporation: sheet metal, pipe and fittings.

F. All Divisions: office, clerical and janitorial supplies.

3.1.4 Files. The source files are presently under revision with a new system being installed based upon subject matter (materials are to be cross-indexed against vendors).

3.1.5 Discussion. The operations of the Purchasing Department are a relatively small segment of the overall organization, and present procedures appear to be entirely adequate. No analysis was made of purchases versus usage rates or inventories since data was not made available.

It was noted that all copies of past purchase orders are forwarded to the Accounting Department for retention, thus making it necessary for the Purchasing Department to call Accounting when necessary to check on prior quotations when preparing new orders. This type of information should be readily available to the Purchasing Department personnel; therefore, the Purchasing Department should retain a copy of all purchase orders. No new forms or extra copies will be necessary. The Purchasing Department, upon receipt of the Receiving Department copy (which has been certified as to quantity and quality by the Receiving Department), can stamp the Purchasing Department copy "Certified to be Correct" or "Following items only certified" plus the date and signature. The Purchasing Department copy would then be a duplicate of the Receiving Department copy, and the latter could be forwarded with the invoice to the Accounting Department for payment and the former retained for filing in the Purchasing Department.

3.1.6 Recommendation. It is recommended that the processing of the purchase orders be modified so the Purchasing Department can retain a copy for file.

3.2 Marketing and Sales. In view of the segmented corporate organization of the Simmons enterprises and the different methods of marketing used by the individual corporations, it is considered advisable to discuss separately each market with its characteristics and applicable sales techniques.

3.2.1 Machine Tool Division.

General. The market for products of the Machine Tool Division is created by the metal-working industry's demand for machinery repair and modernization, and fluctuates directly with the level of activity in heavy industry with no appreciable seasonal variation. Marketing and sales contacts are accomplished in four distinct ways:

A. By personal contact with prospective customers through an intimate knowledge of the industry.

B. "Word of mouth" from one satisfied customer to another with a machine tool problem.

C. Direct advertising in trade journals.

D. Direct presentation to industry as a whole by contracting for space at industrial shows as the IRON and STEEL EXPOSITION (1956).

Organization. Marketing is organized on a geographical basis, as shown on the organization chart, Figure 1-5. A non-exclusive representative is retained for the Chicago area. It will be noted that the sales force cover the loci of the heavy machine industrial concentrations throughout the country, with the exception of the New York City and Detroit areas. With respect to these two industrial areas, management feels that the former area is generally self-supporting, and the Detroit area industries are far too specialized and generally require lead times too short for heavy machinery work. The Boston area is within commuting distance of the local plant so no salesmen need be permanently based there.

The Sales Manager participates directly as an outside salesman whenever the occasion demands and covers sales in all areas outside those specifically assigned. Additionally, as an important function, he acts as a buyer when the company purchases used machinery for resale.

Nature of the Market. The market for heavy metal working industrial machinery can, in general, be broken down as follows:

A. New Machinery: Usually designed and built to the customer's specifications, new machinery requires long lead time and financing by the purchaser. Arrangements with the manufacturer normally consist of periodic payments as construction progresses. Figure 3-1 shows a breakdown of average new machine tool costs for the past forty years. The average cost per machine unit today is almost ten times that of a comparable unit in 1919. This per unit cost has steadily increased even during periods of enormous production increases required by World War II and the Korean conflict. Machines are becoming more complex and expensive while new machine production in units is declining. This trend has created a market demand for rebuilt and "upgraded" machinery.

B. Used Machinery: Frequently machinery is purchased on a speculative basis and is made available "as is" for immediate delivery to meet the customer's requirement. This type of machinery represents considerable less capital investment for the purchaser and may be entirely satisfactory for the intended purpose.

C. Rebuilt Machinery: This equipment can be restored to original design, performance and frequently is upgraded to meet modern and more stringent demands. Costs of rebuilding machinery are normally tax deductible as maintenance expense which is a very important consideration in many instances. Rebuilt machinery carries a performance guarantee.

D. Parts for Simmons-built Machines: These are repair parts for new equipment previously manufactured and sold by the company.

E. Job Order Machinery for Industry: This is machinery built by the company to customer's special design or requirements.

F. Export Market: Machinery which is furnished to firms abroad plus structural steel manufactured by the Kling Engineering Corporation of Chicago. The Simmons Machine Tool Corporation is the exclusive export and foreign advertising agent for Kling but does not handle their products domestically. Simmons customers are made up of machine tool users in the United States and abroad, and comprise some of the largest corporations as well as smaller organizations. A representative sample includes U.S. Steel, Inland Steel, Westinghouse, M. L. Baaynard and Colorado Fuel and Iron.

Customer Relations. This facet of the marketing effort is maintained in three ways:

A. Direct personal contact by sales personnel.

B. Prompt follow-up on all inquiries.

C. Distribution of the house publication, "THE SIMMONS WAY". (Discussed under Advertising). The publication stresses Simmons' capabilities and provides numerous case histories and illustrations of satisfied customers.

Competition. Management feels that the Company cannot compete in the small machine tool manufacturing and rebuilding industry, and therefore concentrates in the heavy machinery field. The Simmons Machine Tool Corporation is one of the largest heavy machine rebuilders in the business. Firms considered as competition in the field are mostly new machine manufacturers who repair their own products plus a few rebuilding firms, none of which are in the local area.

Advertising. At the present time no advertising is being done in institutional type publications, advertising being restricted to trade journals as a matter of policy. Figure 3-2 shows the number of inquiries received during 1958 vs. the advertising media employed. It is noted that several directory-type listings are free of charge. In "SURPLUS RECORD" there is a full page insert every month plus the directory listings in the back. In "RESALE" there is 1/3 of a page every other month. No specific line or particular function performed by the Company is stressed in advertising in any of the media employed.

The Company is concentrating on keeping its name before prospective customers and the trade in general by utilizing its house publication, "THE SIMMONS WAY". This is mailed periodically to a selected list of some 6,000 firms. The mailing list is maintained up-to-date in a file indexed by states and sub-indexed by cities. To assist in keeping the mailing list up-to-date, the office salesmen indicate on incoming correspondence whether the firm is to be added to the mailing list. A card and an ADDRESS-O-GRAPH plate are then made up by the office clerical force.

Each issue of "THE SIMMONS WAY" contains a self-addressed post card questionnaire which readers can forward to the Company for additional specific or general information.

The advertising budget currently is less than 2% of total sales. The advertising budget for the metal-working machine industry as a whole is a little over 2%, according to recent surveys.

The company makes no direct analysis of the number of sales per inquiry received as a result of advertising, either numerically or in dollar values. Management feels that since each inquiry results in considerable follow-up action by correspondence and direct contact, it is not economically practical to analyze advertising results statis-

tically in such a low-volume business. The method of determining the contact source that results in the initial inquiry being received is by the multiple address listing system, (i.e., the Company uses a different street address for each publication advertised in and changes the address in any one publication whenever a new advertising format is used). This system is considered by the company to be preferable to the one calling for "address replies to Dept. X".

The Corporation's current trademark, which is a revision of their original trademark, is as shown in Plate II of this report. Trademark infringement has been encountered only once and this was resolved in Simmons' favor by a single letter and "gentlemens" agreement.

Machinery Purchasing and Sales. Since this is a highly specialized low-volume industry, the sales force must be intimately familiar with the characteristics of machine tools of all the heavier types. This comprises a large range of equipment items, an example of which is shown in Plate II in the Introductory section of this report. An invaluable catalogue library of machine tools and plans is maintained, extending back over 60 years and covering practically every machine tool ever built in the United States. This is considered to be a most valuable asset in backing up the "rebuilding" ability claim. As a matter of policy, the Company guarantees the performance of all rebuilt equipment. Some used equipment is sold in the "as is" condition but without a full guarantee; only a 30-day satisfaction period is provided.

The only units being promoted today under the Simmons trade name are made by a sub-contractor, the WEGNER MACHINERY CORPORATION of Long Island City, New York. This unit is known as the #2 SIMMONS Micro-Speed Turret Lathe. In the past, the Machine Tool Division has manufactured lathes, milling machines and shapers in various sizes. Simmons manufactures repair parts for these machines.

A unique aspect of the corporation is its "one-two-three punch" approach to sales. It can manufacture machinery, it can furnish used machinery rebuilt and upgraded as necessary, and it can similarly rebuild existing machinery. The sales force therefore has three approaches in attempting to fill each customer's requirements.

The purchase of used machinery for resale without prior customer demand is best described as "speculative"

based on intuition of prospective market demands. Where formerly machines were purchased on a bargaining basis, sellers now normally specify sealed bids.

Sales Procedures. In view of the nature of the business no sales quota or target is set. Each salesman covers his assigned territory with the Eastern Pennsylvania salesman normally working out of Philadelphia but returning to Albany at the end of each week.

Upon receipt of an inquiry concerning any one of the markets, the office sales manager processes it and sets into motion the following procedural steps as applicable.

A. A direct reply accompanied by a proposal sheet if the machinery is in stock.

B. A quotation if the inquiry concerns a repair part for a Simmons unit or for a machine part on which a drawing is furnished.

C. A visit by a salesman if the inquiry concerns rebuilding a machine.

D. Upon the receipt of amplifying information a quotation is worked up and furnished the prospective customer.

When a purchase order is received, the following actions are taken by the office sales force:

A. The order is checked against the quotation for price, delivery date, and to ensure that the order is understood in entirety.

B. If the purchase order is satisfactory, a Shop Order is issued to the Machine Shop for production. This is the start of the permanent file on the order.

C. Change orders are issued whenever necessary and usually by typewritten informal memorandum. Verbal orders are occasionally made in order to expedite work.

Estimating Procedures. Basically, cost estimating of rebuilding machinery is initiated and coordinated by the Office Salesmen. In addition, depending on the na-

ture of the inquiry, some or all of the following may participate: Machine Shop personnel, Engineering Department personnel, the Purchasing Agent, the Sales Manager, and the President. Quotations are arrived at by a formula which considers direct labor, direct material, overhead for all departments involved, sales expense, delivery requirements, and basic value of the item.

Terms of Sales. Normally terms of sales of equipment are 1/3 cash at the time of the order and balance upon delivery. In some cases, progressive payment schedules are arranged. All sales quotations are F.O.B. Albany.

Budget Planning. No budget planning is carried out by the Sales Department.

Reports. No formal internal reports are required of the Sales Department. Informal reports are made whenever required. Outside salesmen are required to submit call sheets.

Costs Allocated to Sales. The only direct costs allocated to sales is advertising expenses. All other costs are included under General Expenses.

Discussion. Since no statistics were available, no appraisal can be made relative to the potential market. However, some pertinent observations can be made.

In view of the decreased size of the engineering staff, it is believed that the Company is no longer in a position to take advantage of its vaunted "one-two-three punch" approach to sales previously discussed, since the ability to design and build new equipment has been drastically impaired. Further, despite ever rising new machine tool costs per unit, advertising as a means of pointing out the advantages of rebuilding and upgrading equipment has been cut back. The net result is that the Company for the moment, at least, is static with respect to marketing. The Company is not pushing its advantages to the machine tool industry in the rebuilding field, such as stressing the firm's ability to restore equipment and also save tax dollars for the customer.

3.2.2 Marketing in the Simmons Fastener Corporation.

General. The market for fasteners is entirely industrial and is created by the demand for suitable securing

devices, principally used for containers and shelving. The latter market demand is confined almost exclusively to the refrigerator industry. The container fastening market is industry-wide: if an article is packaged in an accessible reusable container, a fastener of some sort is required. Some of the various types of fasteners are shown in Plate III.

Marketing is accomplished in three principal ways:

A. Direct personal contact with prospective customers by factory sales personnel and by sales representatives.

B. Direct advertising in trade journals and directories.

C. Exhibits at industrial shows such as the DESIGN ENGINEERING SHOW.

Organization. Fasteners are manufactured and produced by the Fastener Division of the Simmons Machine Tool Corporation, while marketing of these fasteners is carried out by the Simmons Fastener Corporation. Both operations are directed by the same individual who acts in the dual capacity of Vice President, Fastener Corporation and General Manager, Fastener Division. He reports directly to one individual who is President of both corporations.

The organization for marketing is split along product and service lines at the plant, and for sales, geographically across the nation. The Vice President of the Fastener Corporation directly supervises marketing with sales assistance from the Fastener Division for plastic fasteners, metal fasteners, and technical sales engineering. Manufacturers representatives are designated by territory nationally to provide industry-wide coverage. A branch warehouse is maintained in Los Angeles, serving California, Oregon, Washington and Arizona, and one representative handles the Canadian market.

The General Manager participates directly as an outside salesman in territories not specifically assigned and makes customer relations visits to all areas at least once a year. On a time-available basis, the assistant for Technical Sales Engineering covers upper New York State in a sales capacity.

Plastic Fastener Market. This market is confined almost entirely to the refrigerator industry, and customers include practically all the major manufacturers in the industry. Simmons SPRING-LOCK shelf supports are used by 45 refrigerator manufacturers and represent more than 90% of the total market demand. Over 500 types of these fasteners are currently manufactured.

Metal Fasteners. The principal users of metal fasteners are container manufacturers of the following major types of equipment: Military (all types from guided missiles to Arctic shelters and portable test equipment), telephone, electronics, special truck bodies, transit cases, reusable containers. Other users are the manufacturers of fluorescent lighting fixtures and large appliances. There is a great market potential seen in extending the use of fasteners in appliances. The potential in the construction industry has been demonstrated on the DEW LINE where prefabricated radome panels were fastened together with Simmons DUAL-LOCKS.

Customer Relations. This facet of marketing is maintained by:

A. Direct personal contact with customers through manufacturers representatives.

B. Telephone and telegraph contact with plant customer service personnel.

C. Visits by technical sales personnel whenever difficulties arise.

D. Periodic visits by the Vice President of the Fastener Corporation.

E. Prompt follow-up on all inquiries.

Advertising. No advertising is carried out in institutional type publications, advertising being concentrated in trade journals. A typical list of publications and directories, together with inquiries received through each is shown in Figure 3-3. The annual total of inquiries received and attributed to advertising approximates 15,000.

The basic advertising philosophy is to use "case history" type ads. A New York city Advertising Agency is retained. The advertising budget is relatively higher for

the non-metallic fasteners since they are new lines. However, the overall advertising budget is approximately 3% of sales, which is normal for the industry. No private mailing list is maintained nor is any advertising circulated by the mailing list method. Catalogues are available upon request.

Due to the large number of inquiries received and the subsequent follow-up actions taken, it is not considered practical or necessary by management to analyze advertising results statistically in terms of magazines versus number of inquiries versus sales dollars. The multiple local address system is used (a different address in each magazine) to identify the source of contact for each industry.

The Fastener Corporation has no registered trademarks but has consistently used the trade names QUICK-LOCK, SPRING-LOCK, ROTO-LOCK, LINK-LOCK and DUAL-LOCK for its products, all of which are patented.

Sales Outlets. A nation-wide network of manufacturer's representatives is the principal medium in selling both plastic and non-plastic fasteners. These representatives work on a fixed commission basis, and execute a standard contract which outlines the representative's responsibilities. Whenever indicated, the Vice-President of the Fastener Corporation and members of the technical sales force also make calls on customers, accompanied by the representative if in an assigned area.

The Canadian market is considered as essentially domestic and handled accordingly. The major portion of the export market is served through General Electric Overseas, and Frigidaire Corporation. Other export customers are served through agents in New York City.

Sales statistics indicate that the Fastener Division has had a steady rate of growth.

Sales Procedures. Upon receipt of an inquiry, regardless of origin, the normal procedure is to reply promptly using a form letter appropriate to the inquiry. Depending on the contents of the form letter, it may be accompanied by mounted samples of locks plus the current catalog. Abbreviated copies of the form letter (less text since it is standard for each type) are made for file and for forwarding to the appropriate area representative for follow-up.

Upon receipt of a purchase order, actions taken are as follows:

A. The customer service man, plastic or metal, is responsible for:

1. Checking the order against the quotation and seeing that the order is completely understood.
2. Determining whether the order can be filled from inventory.
3. Verifying the ability to meet the desired shipping schedule.
4. Forwarding an acknowledgement copy of the order to the customer.
5. Initiating the sales order (See Figure 3-4). A flow analysis and discussion of this order appears in Chapter 4.

B. If production is required, it is scheduled by the customer service man who handles all scheduling and works directly with the plant superintendent.

C. The customer service man then prepares a multi-form invoice and shipping order (Figure 3-5) which is distributed to the various departments and division concerned. The flow chart for this form is presented in Chapter 4.

Estimating. Since the majority of the metal fasteners are standard and are catalogued there is little estimating necessary except for major modifications or new types. The estimating in such cases and for all new plastic fastener orders is a function of the technical sales engineering staff utilizing information furnished by all plant sections. The General Manager establishes the sales price and a quotation is prepared.

Inventory Policy. The Company endeavors to maintain a small inventory on LINK-LOCKS and on some stud type fasteners. No specific levels are set. No other inventories are maintained due to the inability to predict order timing or quantity.

Terms of Sale Policies. Terms are 30 days net, F.O.B. Albany. No discounts are normally granted.

Budget Planning. Budget planning is limited, based on historical data from the year immediately preceding.

Reports. The following internal reports are required by the General Manager:

A. Daily shipping and sales report.

B. Incoming checks (payments on accounts receivable) twice daily.

C. Incoming purchase order report (twice daily).

D. Accounts receivable report (weekly).

E. Thermo-Products shipping report (weekly).

F. Corporation sales record report (monthly). Sales for the current month are compared with those of the corresponding months during the two preceding years for the same product line.

G. Back order control (periodically).

Discussion. Marketing procedures are quite adequate and satisfactory. However, there appear to be some areas that could be explored further, namely:

A. Market research into the available business for comparison with the percentage received. Analysis of marketing journals (particularly those covering government contracts issued for bids) should produce excellent indications.

B. Analysis of the effectiveness of sales media (advertising and manufacturer's representatives) with a view toward measuring effectiveness in terms of sales dollars produced.

C. Stressing the ability to meet Military specifications in advertising.

A problem exists in the sales organization in that it is extremely difficult and sometimes impossible to sort sales statistics by any one or combination of the following bases with respect to the month of occurrence:

A. Source which prompted the initial inquiry - any one of roughly 30 publications or 20 sales activities.

B. Quotations furnished as a result of inquiries.

C. Dollar value of repeat orders received.

D. Dollar value of new orders received.

E. Orders by type of fastener (separate files are indicated for plastic and metal types).

F. Orders by month in which received.

G. Orders by company from which received.

A preliminary investigation of this problem was commenced, and it appears that an information retrieval system could be adapted. A possible solution may exist in the utilization of the proprietary random access ZATO CODING system, which was discussed in detail with cognizant personnel in the organization. The General Manager has entered into correspondence with the licensed agent of this system.

3.2.3 Simmons Industries, Incorporated.

General. Compared with Simmons Machine Tool and Fastener Corporations, Simmons Industries, Incorporated, is a new and relatively small segment of the Simmons enterprises. Sales volume is still fairly low; however, market potential appears to be growing. A single product is produced and marketed. That product is "SKY-PARK", described in the Introductory section and shown on Plate I.

Nature of the Market. The demand for parking space in crowded downtown areas has created a market for parking machines which utilize the air space immediately above crowded ground parking positions. Permanent construction type parking buildings are expensive to build and are subject to real estate taxes. The cost of these buildings must be amortized over extended periods, up to forty years in length. The "SKY-PARK" approach is to install one-level lift type machines in the open lots thus doubling the parking capacity of a given lot. Real estate taxes on the increased parking capacity are avoided since the machines are not considered permanent construction.

Further, the machines can be depreciated over a five-year period resulting in considerable tax savings in the early years of machine life.

Advertising. No direct commercial advertising is employed in the promotion of "SKY-PARK". At trade exhibitions, Simmons Industries distributes its catalogue which describes the technical features of "SKY-PARK" and offers solutions to the whole range of parking lot problems from lot size (including gradients and shapes) construction difficulties, equipment costs, to financing the "SKY-PARK" by various methods. In addition, a short film demonstrating its use has been made for showing to selected audiences.

Sales. The principal method of sales is through factory-based representatives. There is one franchised dealer, Industrial Machining, Limited, Montreal, Canada. It is felt that authorized distributors would have to maintain service organizations and stocks of parts which in view of the current size of the business would not be economically feasible. Engineering services and parts are presently furnished upon request from the factory. The "SKY-PARK" machine is priced F.O.B. Albany with a guarantee of one year on all parts, materials and against defective workmanship. Units have been installed in Washington, D.C., Baltimore, Chicago, New York, Montreal, Indianapolis, Albany and Miami. Units are manufactured as ordered and are not carried instock. The terms of the usual sales contract are: One-third cash upon receipt of order, balance on delivery.

Discussion. Sales functions are quite informal and are conducted under direct supervision of the President. At this stage of growth, the formal use of sales budgets, sales statistics, and cost allocation are not considered significant enough to be assigned individual emphasis. The market demand of the "SKY-PARK" machines has been slowly developing. Public acceptance must be gained before a large market can be realized. Although the company has not followed an aggressive sales promotion policy, progress appears steady and product development is continuing.

3.2.4 Summary of Overall Marketing Operations. It would appear that with the exception of the Fastener Corporation a more aggressive marketing program is necessary to arrest the decline of sales volume in certain areas and to outline a long-range program for both old and new product items. Further, some attempt should be made to determine the contribution of various sales efforts (advertising and sales force

primarily) through sales dollars expended in order to determine their relative contributions.

It is not considered that a Market Research Department is warranted in an organization such as this; however, it is believed that considerable benefit could be obtained from the services of an expert in this field.

3.2.5 Recommendations. It is recommended that:

1. The sales approach in the Machine Tool Division emphasize improved performance available from rebuilt equipment and concurrent substantial tax saving, and concentrate on prospects having the highest potential need for rebuilt machinery.

2. An informal information retrieval system be investigated to assist in advertising and sales budget planning in the Machine Tool Division.

3. A member of the office staff in the Fastener Division be assigned the task of reviewing government orders out for bid with a view of soliciting fastener business. The use of a Washington business service is worth consideration.

4. The Fastener Corporation consult with the advertising agency with a view toward modifying current advertising by the addition of a statement concerning the "ability to meet Military specifications" on this or "Most other fastener" problem.

5. Continue the investigation of an information retrieval system to provide sales data information in the Fastener Corporation.

6. Consideration be given to the retention of a professional Market Research organization on a consulting basis to serve all divisions.

UNITS AND VALUE OF MACHINE TOOL SHIPMENTS

METAL CUTTING TYPES ONLY

Year	Shipments		Average Cost per Machine Tool
	Units	Dollars	
1919	99,000	$ 161,000,000	$ 1,626
1920	79,000	151,500,000	1,918
1921	21,000	36,000,000	1,714
1922	28,500	43,300,000	1,519
1923	36,000	79,300,000	2,203
1924	25,000	69,600,000	2,784
1925	31,000	86,700,000	2,797
1926	36,500	105,000,000	2,877
1927	28,000	87,000,000	3,107
1928	36,000	128,000,000	3,556
1929	50,000	185,000,000	3,700
1930	23,500	96,000,000	4,085
1931	12,000	51,000,000	4,200
1932	5,500	22,000,000	4,150
1933	6,000	25,000,000	4,000
1934	13,500	50,000,000	3,704
1935	23,000	85,000,000	3,696
1936	40,000	133,000,000	3,325
1937	55,000	195,000,000	3,545
1938	34,000	145,000,000	4,265
1939	51,500	200,000,000	3,883
1940	110,000	440,000,000	4,000
1941	185,000	775,000,000	4,189
1942	307,000	1,320,000,000	4,300
1943	266,000	1,180,000,000	4,436
1944	136,000	497,000,000	3,654
1945	103,000	423,700,000	4,114
1946	75,000	334,800,000	4,464
1947	60,000	306,000,000	5,100
1948	50,000	288,450,000	5,769
1949	34,500	249,150,000	7,222
1950	41,500	305,550,000	7,363
1951	70,800	632,250,000	8,930
1952	96,800	1,125,900,000	11,630
1953	91,500	1,191,200,000	13,019

FIG. 3-1

Year	Shipments		Average Cost per Machine Tool
	Units	Dollars	
1954	58,500	$ 891,750,000	$15,251
1955	50,500	670,400,000	13,275
1956	63,900	886,150,000	13,868
1957	53,700	843,900,000	15,726
1958	27,400	411,000,000	15,010

February 20, 1959

War Production Board estimates 1941 through July 1945. All other years estimated from reports to the National Machine Tool Builders' Association.

FIG. 3-1
(Cont'd.)

SALES INQUIRIES RECEIVED BY SIMMONS MACHINE COMPANY
LISTED BY PUBLICATIONS ADVERTISED IN

PUBLICATION	1958 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
MACRAE'S Bluebook (F)	6	3	7	3	2	2	1	2	3	7	4	2	8
Thomas Register*	51	47	66	51	46	79	44	35	60	55	53	49	28
Iron & Steel Engineer's	0	0	0	0	0	0	0	0	0	0	0	0	0
RESALE*	2	6	5	8	4	6	4	2	2	4	0	6	4
SURPLUS RECORD (OLD)	7	3	10	10	4	7	10	3	5	10	8	6	3
SURPLUS RECORD INDEX (OLD)	0	0	0	10	0	0	0	0	0	0	1	0	0
IRON AGE	1	2	4	2	0	0	0	0	2	1	0	0	1
SURPLUS RECORD (NEW)*	20	10	18	14	22	23	7	9	12	14	12	19	11
SURPLUS RECORD INDEX (NEW)*	4	10	8	5	6	5	6	4	5	5	8	6	5
FORTUNE (NEW)	2	2	1	0	0	1	1	0	1	1	1	2	1
DIRECTORY (F)	2	3	2	4	4	4	3	4	1	3	0	1	4
STEEL	0	0	0	0	0	0	0	0	0	0	0	0	0
Canadian MCHY DIR'CY (F)	0	0	0	2	0	0	0	0	0	0	0	0	0
ANNUAL DIRECTORY EQ & SUPPLY (F)	0	0	0	0	0	0	0	0	0	0	0	0	0
FORTUNE (OLD)	1	3	4	2	3	1	4	3	2	1	1	2	7
SIMMONS WAY	0	9	0	2	2	1	1	2	6	4	0	0	0
TROY ROAD	12	6	16	30	20	25	15	15	20	6	4	10	20

(F) -- Free listing.
* -- Currently carrying advertising
OLD-NEW -- Refers to street address used after advertising format changed.

FIG. 3-2

INQUIRIES FOR MONTH OF MARCH - 1958

Magazine Inquiries:			
Electrical Manufacturing	Spring Lock	21	
Materials in Design Eng.	Link Lock	60	
Aeronautical Engineering	Catalog (on Schedule)	--	
Industrial Bulletin	Catalog	36	
New Equipment Digest	Catalog	59	
Product Design & Dev.	Catalog	180	
Design News	Hinge Lock&Link Lock	97	
Electronic Design News	Spring Lock	118	
Electronic Design	Hinge Lock&Link Lock	26	
Industrial Design	Shelf Support	2	
Machine Design	Spring Lock	124	
Product Engineering	Hinge Lock&Link Lock	16	
No Reference Numbers		54	
Total Magazine Inquiries - - - - - - - - - - - -			793
Free Listing:			
Industrial Woodworking	Dual Lock	43	
Product Equipment	Hinge Lock	3	
Design News	Catalog	333	
Design Engineering	Hinge Lock&Link Lock	4	
Product Design & Dev.	Sweet's Catalog	105	
Business Abroad		2	
Product Engineering	Catalog	176	
Electronic Design	Catalog	48	
Modern Packaging	Spring Lock	1	
Plastics World	Catalog	71	
Purchasing Week		1	
"Steel" Metalworking	Catalog	2	
Western Industry	Catalog	39	
Industrial Equip. News	Hinge Lock	12	
New Equipment News	Catalog	12	
Plastics Technology	Catalog	10	
American Exporter	Hinge Lock	1	
American Aviation	Catalog	63	
Total Free Listings - - - - - - - - - - - - - - -			926
Total			
**Thomas Register		9	
Electronic Buyers Guide		1	
			10
Total Number of Inquiries for Month of March, 1958			1,729

FIG. 3-3

SALES ORDER

SIMMONS MACHINE TOOL CORP.

21980

ALBANY, N. Y.

SHIP TO	CHARGE TO

DATE	CUSTOMER ORDER NO.	SHIPMENT PROMISED	SOURCE OF ORDER	SHIP VIA:

TERMS	TYPE - B/L	TESTED BY	O. K'D BY

EM NO.	QUANTITY SHIPPED	DESCRIPTION	EXTENSION

SIMMONS MACHINE TOOL CORPORATION SALES ORDER

FIGURE 3-4

Simmons

fastener corporation

north broadway albany 1, n. y., u.s.a. albany 62-5431

SHIPPED TO:

Sold To:

CUSTOMER ORDER NO.	OUR ORDER NO.	SALESMAN	F. O. B. ALBANY, N. Y.	INV. DATE AND DATE OF SHIPMENT
SHIP VIA:		TERMS:		OUR PACKING LIST No.

QUAN. ORDERED	QUAN. SHIPPED	BACK ORDERED	DESCRIPTION	UNIT PRICE	AMOUNT

CARTONS	BARRELS
NO. ____ PCS. ____ WGT. ____	NO. ____ PCS. ____ WGT. ____
" ____ " ____ " ____	" ____ " ____ " ____
" ____ " ____ " ____	" ____ " ____ " ____
" " "	" " "

WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7 AND 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14. THEREOF.

FORM NO. S.O.-INV.

SIMMONS FASTENER CORPORATION INVOICE AND SHIPPING ORDER

FIGURE 3-5

CHAPTER 4 - GENERAL ACCOUNTING, COST ACCOUNTING, AND OFFICE ADMINISTRATION

The General Accounting function of the Simmons Machine Tool Corporation is centralized to include service to all divisions and subsidiary corporations of the parent company. The organizational structure will be discussed followed by material devoted to special reports and the details of the system operation.

A formal cost accounting system in the true sense of the definition is non-existent at Simmons Machine Tool Corporation. However, certain cost accounting procedures are followed in costing job orders in the Machine Tool Division of the company, and these will be discussed in detail. Since the Fastener Division is the primary manufacturing organ within the company and since a cost accounting system is not in effect in this division, a proposal will be developed relative to the establishment of an appropriate system.

Office administration and procedures are organized and controlled in two distinct parts, and will be taken up separately. The first will consist of that system serving the parent company, the Machine Tool Division and the H-M-C Corporation, and the other, which pertains to the Fastener Division and the Simmons Fastener Corporation.

4.1 General Accounting.

4.1.1 Organization. A reasonably standard, general accounting system is centralized under the Vice President and Comptroller, and functions under the immediate control of the Assistant Comptroller, who is charged with the day to day management of accounting department operations. No organization chart appears in writing, hence no differentiation was possible between a formal delineation of responsibilities and authority, and the informal existing relationships presently in effect. Figure 1-3 portrays this informal working organization as visualized, as a result of discussions with the available officers and personnel concerned. Inquiry and discussion during the study would indicated that the Vice President and Comptroller's

duties consist primarily of conducting required audits, preparing annual tax returns, setting depreciation rates, and consulting with the President on various policy-making decisions; while the Assistant Comptroller responsibly actively manages the department. This informal arrangement appears to transcend the latitudes normally accepted in organizational relationships between executive and assistant, and places the Comptroller more in a position of staff advisor to the President, Following necessarily, as a direct result of this situation, is the Assistant Comptroller's required continuous direct access and responsibility to the President. In addition to his duties of routine departmental management, the Assistant Comptroller personally handles all disbursements and cash receipts for all corporations within the company, and prepares all financial statements from a trial balance prepared and submitted by an assistant.

4.1.2 Machine Records and Accounts. Three Burroughs bookkeeping machines are utilized to maintain the majority of the accounts. Accounting policies are established by the President. The Assistant Comptroller has a total of three assistants reporting directly to him. One assistant is in charge of all bookkeeping machine operations and has the title of Machine Records Bookkeeper. Another, with the title of Accounts Payable Bookkeeper, handles accounts payable, checks, and statistical reports; and the third assistant handles billing and filing and is called a Billing Clerk. The Machine Records Bookkeeper has two machine operators reporting directly to him. Each operates one of the three bookkeeping machines with the third machine being operated by the Machine Records Bookkeeper himself.

The accounting department utilizes the three bookkeeping machines in the following manner to handle the majority of accounts.

Machine Number 1:

A. Payroll for all employees except those employed by the H-M-C Corporation and the Fastener Corporation.

B. General ledger accounts for the Fastener and Machine Tool Divisions.

C. Accounts receivable for the Machine Tool Corporation.

D. All trial balances.

Machine Number 2:

A. Accounts receivable for the Fastener Corporation.

B. Dealer's commissions payable for the Fastener Corporation.

C. Payroll for the H-M-C Corporation and the Fastener Corporation.

D. Disbursements for the Machine Tool Corporation.

Machine Number 3:

A. Accounts payable for the Machine Tool Corporation.

B. Accounts receivable for the Fastener Division.

The three bookkeeping machines are the means by which the accounts as shown in the Chart of Accounts, Figure 4-1, are maintained. The composite of all the series of accounts form the General Ledger. These summary accounts are recorded on machine record account cards and are stored in roll-around files. Subsidiary ledger accounts are maintained on the same machine record cards as are the general ledger summary accounts.

The procedure followed is to record individual transactions during the months on the pertinent subsidiary ledger account cards and then to summarize these subsidiary accounts once a month in the general ledger accounts. General ledger accounts are serialized as indicated in Figure 4-1. The 900-999 series is open and held in reserve.

Several of the accounts in Figure 4-1 are illustrated as follows:

A. Asset account No. 117 is entitled, "Personal Ledger" and consists of the following individual accounts:

1. Tools purchased by employees through the company.
2. Loans to employees.
3. Attachments on wages.
4. Employee pledges to charity.

B. Asset account No. 119 is the consolidated accounts receivable for all customers in all corporations.

C. Liability account No. 201 is the consolidated accounts payable for all customers in all corporations, and contains individual debits and credits for each customer.

D. Fastener Corporation account No. 519 is accounts receivable for the Simmons Fastener Corporation only.

Expense control accounts are also machine records, the individual breakdown of which is illustrated in Figure 4-2. Each one of these account numbers is prefaced by a digit identifying the corporation responsible for the entries to the account as per the chart of accounts numerical series.

4.1.3 Receipts and Disbursements. All cash receipts accounts are pen and ink entries which are handled personally by the Assistant Comptroller, as are all disbursements with the exception of those involving the Machine Tool Corporation. Depending upon the corporation in who name a disbursement is required, a check drawn to cover this disbursement must be signed as follows:

Corporation	Signature/s Required
H-M-C Corporation	President plus the Chairman of the Board, except payroll checks which require the signature of the Sales Manager.
Machine Tool Corporation	Either the President or Chairman of the Board.
Fastener Corporation	Either the President or Chairman of the Board.
Simmons Industries, Inc.	President only.

Corporation	Signature/s Required
Sim-Par Manufacturing Corp.	President or Chairman of the Board.

The above designation of officers of the parent company is a rigid requirement, which permits no check signing authority being vested in the Comptroller or Assistant Comptroller regardless of the size or nature of the check. This centralization of check signing authority appears overly stringent and results in periodic embarrassing delays in disbursements to cover routine recurring nominal expenses.

4.1.4 Billing Procedure. Since the Machine Tool Division is a job order shop which contracts to rebuild or modernize used machines at considerable cost, and in most cases, over an extended period of time, a special billing procedure has been established. One third of the total estimated price is due with the order from the customer, and monthly thereafter he is billed an amount equal to the cost of material and direct labor applied to the job as it progresses. After the job has been completed the balance of the contract price is due on a net thirty days basis. On job orders of a smaller magnitude, terms are one third upon receipt of the order, and the balance due on sight draft bill of lading. Discounts are not offered by the Machine Tool Division. This system of billing on large expensive orders favors both the Machine Tool Division and the customers in that the Machine Tool Division receives working capital with which it may defray the costs involved in the job and, on the other hand, the customer is disbursing smaller amounts of cash in payment thereof. As a result, the customer is saved the interest expense which would have been involved had it been necessary for him to borrow money to cover the entire contract price in one lump sum. This advantage is obviously all important to the small business with limited capital available.

Products whose origin of manufacture are within the Fastener Division are billed to the customer by the Fastener Corporation, utilizing a standard Fastener Corporation multiform invoice booklet, Figure 3-5. The multiform invoice booklet is constructed in such a way as to provide for billing the customer, and simultaneously the Fastener Corporation in an amount equal to eighty-five per cent (85%) of the customer's price. Duplicate copies of

the invoice to the Fastener Corporation appear in the billing booklet, one serves as accounts receivable for the Simmons Machine Tool Corporation from the Fastener Corporation and the other as accounts payable for the Fastener Corporation to the Machine Tool Corporation (See Figures 4-6 and 4-8). The Fastener Corporation, as a subsidiary selling corporation for the Fastener Division, must derive from this fifteen per cent (15%) margin all selling expenses, administrative expenses, and profit.

4.1.5 Credit Procedure. The credit department of the Simmons Machine Tool Corporation functions exclusively for the Machine Tool Division. It is administered by the Assistant Comptroller in close liaison with the Sales Department. Due to the fact that a good percentage of Machine Tool Division business is with companies in foreign countries, the New York City sales office has been assigned the responsibility of over-seeing and approving all prospective and actual customers abroad. Letters of credit are required from customers for all machines sold out of the United States. A bank in New York City acts as custodian for all payments on these machines.

The Fastener Division has no internal credit department as such. All credit decisions are made by the Sales Department with past due accounts receiving periodic reminders through the mail. Accounts receivable records are maintained in the central accounting office.

4.1.6 Depreciation. Schedules and rates of depreciation for the assets of all corporations are determined by the Vice President and Comptroller, and are given to the Assistant Comptroller for implementation.

Three standard methods of depreciation are used. The straight line method is used on all assets which were on hand prior to 1955, and the sum of the digits method or the declining method on all assets purchased subsequently. The sum of the digits method is used where it is deemed advantageous to depreciate a large portion of the asset valuation the first year. The declining method, which depreciates an asset on the basis of cost rather than book value, is used when deemed most advantageous by management. Once one method has been initiated on a particular asset, it is continued.

4.1.7 Reports and Statements. The financial statements comprise the major portion of reports published by the Ac-

counting Department. All subsidiary corporation operations are reported in the consolidated financial report of the parent company with the exception of the Machine Tool Division and the Fastener Division whose operations are reported separately.

The financial statements are scheduled to be published monthly by the Assistant Comptroller assisted by the Machine Records Bookkeeper, who prepares the trial balance. All books are closed monthly for summary purposes.

Simmons Industries Incorporated and Sim-Par Manufacturing Corporation use the fiscal year ending 30 April as the basis for financial reporting whereas all other corporations in the complex use the calendar year.

The consolidated reports consist of the Consolidated Balance Sheet, the Consolidated Financial Statement, and the Consolidated Profit and Loss Statement.

The Consolidated Financial Statement details all account schedules as follows:

Schedule A - Sales Retail
Schedule B - Purchase Retail
Schedule C - Factory Variable Expense
Schedule D - Factory Fixed Expense
Schedule E - Administrative Variable Expense and Administrative Fixed Expense
Schedule F - Selling Expenses
Schedule H - Investment Real Estate

The profit and loss statements and the financial statements for the Machine Tool Division and the Fastener Division round out the financial statements.

In tracing the flow of the above reports from their original source, through to the intended recipients, it was noted that their receipt was oftentimes sporadic and/or too late to be the basis of effective action.

Standard payroll reports originate in the Accounting Department. They are summarized as follows:

A. Quarterly payroll report to the Federal government relative to F.I.C.A. tax.

B. Quarterly report to the State Government relative to state unemployment compensation.

C. Quarterly report of federal income tax withheld to the Federal Government.

D. Annual report to the Federal Government of total federal income tax withheld from each employee.

Special reports are published for distribution to top management as follows:

A. Accounts receivable report, which is published once a week and lists all accounts receivable in excess of one hundred dollars ($100). These accounts are listed by date due, and concern the Fastener Corporation and the Machine Tool Corporation.

B. Machine Tool Corporation Disbursement report, which is published daily for the exclusive use of the President and the Chairman of the Board, and contains a complete list of disbursements for the day.

C. Checks received report, which is published daily for the exclusive use of the President and Chairman of the Board, and lists all checks received for the particular day.

4.1.8 Recommendations. It is recommended that:

1. Consideration be given to delegation of a certain degree of check signing authority to cover routine recurrent nominal expenditures.

2. The possibility of consolidating pen and ink accounts of cash receipts and disbursements onto machine record accounting cards be considered.

3. A system be instituted to ensure both timely and positive delivery of all financial reports to those officials designated to receive them.

4.2 Cost Accounting. Cost accounting consists of the planning, determination, recording, analysis, and interpretation of the costs of producing and distributing products. It is the keystone of all accounting, and as such provides the

means by which management is furnished vital information upon which sound administrative decisions can be made to control effectively both costs and profits. Each member of the management team from the chief executive to the foreman is constantly making decisions which affect costs and has responsibility for certain costs. A cost accounting system assists in planning the costs to be incurred under the responsibility of each manager, collects the actual costs, and presents them in such a manner that they can be controlled toward the established profit objective.

While no actual cost accounting system and control procedures are in effect, in their strictest interpretation, in the Simmons Machine Tool Corporation, the methods of accumulation of costs for reporting purposes will be discussed for both the Machine Tool Division and the Fastener Division of the parent company.

4.2.1 Machine Tool Division. The Machine Tool Division is a job order shop in which actual expenses are charged to individual job cost sheets as they are incurred. There is no budget for operating costs on the Machine Tool Division level, either fixed or flexible, and, as a result little or no planned control of costs is in evidence.

Material. The Shop Superintendent determines the material requirements for a particular job, whether it be in the form of special parts requiring special order, or raw materials from stock. On special items the Shop Superintendent obtains the material through the Purchasing Department and, on receipt, the purchase price is taken directly from the supplier's invoice and applied to the associated job as a material cost. Raw material from stock is charged to the job at the purchase price regardless of when it was purchased. Records were not available for perusal, but it was learned in discussion that certain stocks of material have been in storage for many years and that no accurate purchase price data is available for this material.

The cost of material used, determined in this manner, is accumulated for each particular job order, but is not utilized to reflect the material portion of cost of goods sold. It appears to be used primarily as a basis from which to estimate the cost of future comparable jobs. For financial reporting purposes the cost of material used is computed as a percentage of gross Machine Tool Division sales, applied as a relief of inventory figure. Presently, sixty-two per cent (62%) of gross sales is subtracted from

the beginning inventory plus purchases during the period to arrive at an ending inventory figure. Annually, an inventory of material is taken and the actual value determined is compared with the final inventory figure resulting from monthly "reliefs" over the preceding periods. This difference is analyzed to determine the amount by which to adjust the material cost rate, and is then charged off to profit or loss. This method of applying material used as a fixed percentage of sales has several predominant weaknesses. It does not necessarily present a true indication of material costs on the profit and loss statement, nor is it capable of separating manufacturing costs for particular items produced. The sales figures for a particular month consist in part of machinery which was in process and accumulating material costs, not in the current period but in all probability in the several periods preceding. It makes no attempt to charge expenses to the period in which they were actually incurred, but tends to find sufficiency only in the assumption that production remains relatively constant over the months, not only in level of activity but also in types which require a similar quantity of raw materials in the rebuilding process.

Labor Cost. Individual worker's daily time tickets are the records from which direct labor is applied to jobs. These time tickets are submitted daily to a clerk who calculates the amount of direct labor in dollars and then applies this amount to the job order number listed on the time ticket.

Manufacturing Expenses. Until very recently manufacturing expense was charged to a job at a rate of 211% of the direct labor dollars involved. This 211% was calculated by a management consulting firm approximately 15 years ago, and was not adjusted until very recently. At present, a rate of $5 per direct labor hour is applied as manufacturing expense. Total direct labor hours utilized on a job are calculated and multiplied by $5. This amount is applied directly to the job as burden. The basis of determination of this rate was not available.

Records. All cost calculation, application, and record keeping is accomplished by the secretary to the Purchasing Agent.

4.2.2 Fastener Division. There is no evidence of a cost accounting system in the division.

Material Cost. A direct material account is in existence; however, material issue is not controlled. Movement of material forms are used to record movement of material from stock to work-in-process. These transfer forms are used primarily to obtain information for replenishing stock.

Inventory Relief. The method of inventory relief discussed in the Machine Tool Division is also utilized in the Fastener Division, therefore a figure of 62 per cent is used. It was determined that using 62% of sales as material cost for all fasteners, regardless of type, results in a distortion of the actual unit cost of each type. The material cost involved in the production of the various type fasteners varied from 33 per cent of total unit cost for the LINK-LOCK to 68 per cent of total unit cost for an average molded plastic SPRING-LOCK. Depending upon the relative volume of each of the type fasteners, the actual material cost will differ from that calculated by formula by a greater or lesser percentage. The result is an unrealistic apportionment of material cost to individual type fasteners.

Labor Cost. Direct labor hours are accumulated and converted to direct labor dollars by utilization of individual employee hourly rates. Direct labor is accumulated and carried directly to the profit and loss statements.

Manufacturing Expense. The method of application and rate used are identical with that discussed for the Machine Tool Division.

Discussion. One means of effective and intelligent control of activities could be obtained through the establishment of standards and budgets. The extent to which budgets are established and the type of standard utilized are dependent upon the peculiarities of the individual organization. A cost accounting system which utilizes standard costs and a flexible budget should adapt quite well to the Fastener Division.

Budgets. A system of budgets for an organization may be either fixed or flexible. The fixed budget is appropriate in an organization with a reasonably constant sales volume. The flexible budget is a series of fixed budgets which are adjusted for different rates of production or output.

Flexible budgets would appear applicable to the Fastener Division in such areas as sales, production, ma-

terial, labor and manufacturing expense. Due to the cyclical nature of production in the Fastener Division the budget period should cover a complete seasonal cycle. Since financial statements are issued periodically, budgets should be prepared on the same time basis in order to facilitate a comparison of budgeted expenses with actual expenses.

A budget committee should be organized with members being functional executives such as the Sales Manager, the Production Manager, and the Comptroller. This committee will function to: A) receive and review individual budget estimates; B) suggest revisions; C) decide on general policies affecting more than one primary department; D) approve final budgets; E) receive and analyze budget reports comparing actual results with the budget; F) recommend corrective action where necessary. A budget committee should report directly to the President of the Corporation.

A procedure for setting up a budget is as follows:

A. Canvass all sales branches requesting sales estimates on each product to be marketed during the period and combine these figures into a sales budget showing estimated net sales.

B. Estimate production, materials, labor, manufacturing expenses and plant requirements and incorporate these into a budget showing cost of sales.

C. Prepare a budget from estimated selling and administrative expenses.

D. Prepare a cash budget for the period showing estimated receipts and disbursements.

E. Prepare a budget showing estimated operating results for the period.

F. Prepare a projected balance sheet indicating the projected financial condition of the division at the close of the period.

A flexible manufacturing budget for varying levels of activity should be set up on a departmental basis. In order to form a flexible budget, it is necessary to consider

each expense separately and determine that portion of the expense which is fixed and that portion which varies with output. Determination of the fixed portion requires a careful analysis by the budget committee. After the fixed portion of the particular expense has been determined, subtraction from the total expense yields the variable portion. Knowledge of either direct labor hours or machine hours, as applicable, enables the calculation of a variable burden rate. As a result, a flexible manufacturing expense budget for a department can be established.

The determination of the normal capacity of the plant is very important for a number of reasons: A) it forms the foundation for the entire budget system; B) it is used in calculating the standard costs of the various products produced; C) it forms the basis for operating schedules and the predetermined profit goal. Normal capacity should be determined for the entire division as an integrated unit and then departmental normal capacity should be determined. As a result, production bottlenecks can be isolated and necessary corrective action can be taken.

Figure 4-3 illustrates the flow of information in the formulation of a standard cost system and its utilization by the budget committee to establish required budgets. As is illustrated, a standard cost committee is required.

Standards. The standard cost to be utilized should represent not what costs are or have been but what they should be. It must be a gauge against which actual costs are held. The standard cost committee must determine how many standard dollars should be allowed against the actual dollars charged to each operation. A denominator or "factor of variability" is required. This denominator serves as a basis for computing the standard cost for any level of activity and must have the following characteristics:

A. It should represent production. This means that standard costs per productive standard hour must be established.

B. It should be uniform. For example: the standard hour is uniform, for it is the common measure of output of all jobs and products.

C. It should vary with costs. For example: an operation requiring twice as much time on one product as on another and hence twice as much labor cost, will

also require twice as many standard hours.

D. It must be comprehensible to everyone involved.

The determination of these standards is discussed in Chapter 7 of this report. One method of standard costing utilizes the concept of standard costs being calculated at the level of activity normally expected to prevail, and being charged into and through the control accounts at this standard. This means of recording costs permits their utilization not only as a basis for inventory valuation but as a control device as well. Variances from standard are segregated at the points where costs are put into process, and are not carried forward in a multiplicity of unit product costs. Variations from standard cost, as pertains to the introduction of material and labor, are continuously accumulated in their respective variance accounts, and enter the reporting statements along with the manufacturing expense variances, at the end of the accounting period as period costs. Once the standards for cost and quantity of material and labor have been determined, and an appropriate burden rate computed for manufacturing expenses, standard costs would flow through the control accounts as illustrated diagramatically in Figure 4-4.

4.2.3 Recommendations. It is recommended that:

1. Management institute or refine as necessary present methods of cost accumulation which will provide all information necessary to determine the actual costs of manufacturing as the basis for establishing standards.

2. In order to provide for budgetary and production cost controls, consideration be given to the establishment of an appropriate standard cost system upon which flexible budgeting may be used.

4.3 Office Administration.

4.3.1 General. The office administrative force in the Simmons Machine Tool Corporation is divided into the staff serving the entire parent company and subsidiaries, and a special office force in the Fastener Division responsible to the General Manager. Normal office services such as mail handling, internal office communications, stenographic

services, maintenance of files, and operation of office equipment are provided in their respective areas of responsibility.

4.3.2 Machine Tool Corporation. In addition to the normal functions described above, services are provided to the various staff functions as detailed in the other chapters of this report. An office supplies storeroom is maintained in this section under the direct supervision of the Office Manager, who replenishes the stock when depleted. This is accomplished by direct submission of a requisition to the Purchasing Department. A catalogue room is maintained adjacent to the main office and contains a complete listing of machine tools manufactured in the United States.

Modern office equipment is in evidence including a duplicating machine and a direct teletype connection to Western Union.

All incoming mail is brought directly to the Office Manager. It is then separated into that for the Machine Tool Corporation and that for the Fastener Division. The Office Manager opens, reads and routes mail for the different departments within the Machine Tool Corporation, with the exception of the Fastener Division, and processes and dispatches outgoing mail.

Internal plant mail messenger service is provided, as are telephone switchboard facilities and an intra-plant buzzer call system. Central files are maintained alphabetically in the main office for a period of two years, while corresponding files for the previous five years are stored separately. These files consist specifically of:

A. A Day File which contains quotations, pending offers, follow-up procedures and instructions.

B. An Available File which lists all the machines offered for sale to the Simmons Machine Tool Corporation.

C. A Want File which lists all machines currently wanted by customers.

4.3.3 Fastener Division. While the administrative force of the Fastener Division provides routine services comparable

to those of the Machine Tool Corporation force, a large portion of their responsibilities lie in provision of direct secretarial assistance to the various officials of the Division.

Office Work Procedures. For purposes of analyzing office work procedures, the flow of the Machine Tool Corporation Sales Order and the Fastener Corporation Invoice were considered to be representative of paper work handling within the entire parent company. Details concerning the procedure flow for these two forms are as described below, and as diagramed and charted in Figures 4-5 through 4-9.

Sales Order. Upon the receipt of a customer order a transcript of the order (5 copies) is prepared and is distributed within the Fastener Division. The copy of the transcript along with the customer's order, which is responsible for the preparation of the sales order, is first routed to the traffic manager for verification of customer credit. When the customer's credit has been verified, the above listed papers are routed to the Assistant Sales Manager who acknowledges receipt of the order, verifies the price and delivery data and logs the order. The papers are then routed to the traffic manager who extends the price on the transcript, determines the responsible sales agent and specifies shipping instruction. He then causes a sales order to be prepared.

As shown on Figure 4-5 (Operation Analysis Chart of Sales Order for Simmons Fastener Division) the various copies of the sales order are used to initiate stock issue or manufacture, various control procedures, and preparation of invoice and shipping papers. Figure 4-7 (Sales Order Processing) shows the flow of the various copies between the several sections and divisions of the corporation.

Invoice and Shipping Order. The traffic section, upon return of the Engineering Copy of the Sales Order from the Plant Superintendent, prepares the Invoice and Shipping Order. The form is of a type which is prepared as a whole but breaks into a multi-copy Invoice and a multi-copy Shipping Order when separated.

As shown on Figure 4-6 (Operation Analysis Chart of Invoice and Shipping Order for Simmons Fastener Division) the various copies of the Invoice are used to bill the customer, bill Simmons Fastener Corporation, credit Simmons Fastener Corporation and provide information to accounts

receivable. The various copies of the Shipping Order are used to package the order, inform other sections that the order has been shipped, as packing lists, etc. Figure 4-8 (Invoice Processing) and Figure 4-9 (Shipping Order Processing) show the flow of the various copies between the several sections and divisions.

4.3.4 Recommendations. It is recommended that:

1. The requirements for file copies of standard forms be reviewed and that the number of separate files be reduced. It is considered feasible in the Simmons Fastener Division to reduce the file requirements as maintained in the central office to that of one master file.

2. The use of a transcript of a customer's order be discontinued and the information thereon recorded be recorded on the customer's order; this would result in a reduction of handling time as well as a reduction in work tasks.

3. Copies of forms which have served their purpose be disposed of by those sections where no further use is to be made of them.

CHART OF ACCOUNTS

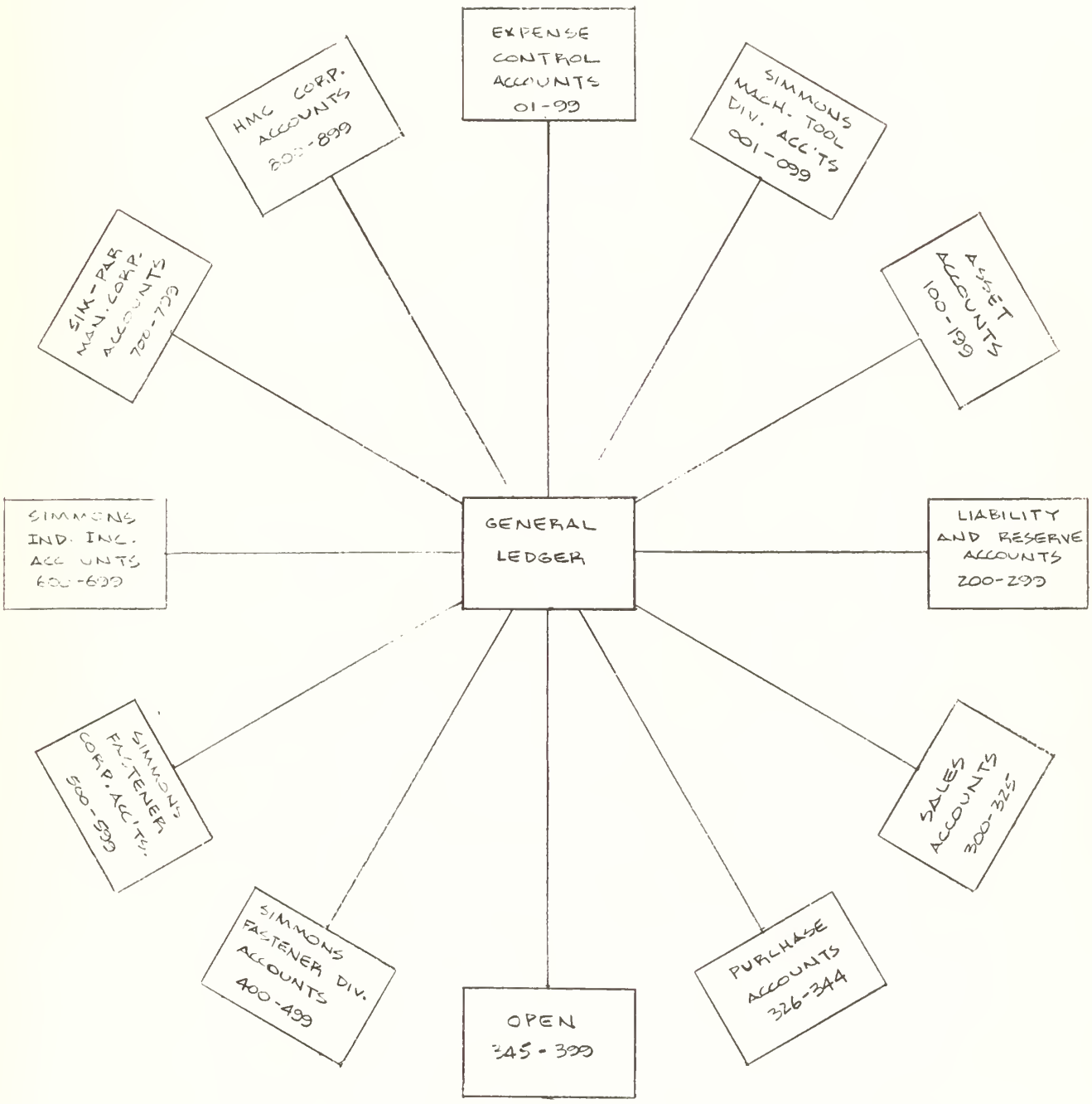

EXPENSE CONTROL ACCOUNTS 01-99
HMC CORP. ACCOUNTS 800-899
SIMMONS MACH. TOOL DIV. ACC'TS 001-099
SIM-PAR MAN. CORP. ACCOUNTS 700-799
ASSET ACCOUNTS 100-199
SIMMONS IND. INC. ACCOUNTS 600-699
GENERAL LEDGER
LIABILITY AND RESERVE ACCOUNTS 200-299
SIMMONS FASTENER CORP. ACC'TS. 500-599
SALES ACCOUNTS 300-325
SIMMONS FASTENER DIV. ACCOUNTS 400-499
OPEN 345-399
PURCHASE ACCOUNTS 326-344

FIGURE 4-1

EXPENSE CONTROL ACCOUNTS

ACCT. NO.	NAME OF ACCOUNT
01	Direct Labor
02	Officers Salaries - 100% Dept. Expense Proration
03	Salesmen Salaries
03A	Engineering Salesmen
04	Clerks & Stenographers - Partial Dept. Expense Proration
05	Supervision - Factory
05A	Supervision - Offices - Partial Dept. Expense Proration
05RE	Supervision - Real Estate
06	Maintenance Labor Building
06RA	Real Estate Administration - Partial Dept. Expense Proration
06RE	Real Estate Maintenance Employees
07	Maintenance Labor - Machinery
08	Watchmen & Janitors
09	Engineers & Draftsmen
10	Crane Operators & Riggers
11	Experimental & Development Labor
12	
13	
14	Overtime Premiums
15	Truck Drivers & Chauffeurs
16	Pensions
17	Bonus
18	
19	Repairs & Maintenance Supplies - Buildings
20	Repairs & Maintenance Supplies - Machinery
21	Repairs & Maintenance Supplies - Auto & Trucks
22	Repairs & Maintenance Supplies - Office
23	Depreciation - Buildings & Equipment
24	Depreciation - Office Equipment
25	Depreciation - Auto & Trucks
26	Depreciation - Patents
27	
28	
29	
30	Insurance - Executive Life
31	Insurance - Fire, Use & Occupancy
32	Insurance - Workmen's Compensation
33	Insurance - General
34	Insurance - Auto & Trucks

Figure 4-2

ACCT. NO.	NAME OF ACCOUNT
35	
36	Miscellaneous Expense
37	Factory Supplies
38	Electrical Power & Light
39	Heating - Oil & Coal
40	Water
41	Small Tool Purchases
42	Shipping Dept. Packing Supplies
43	Taxes - Unemployment Insurance
44	Taxes - Old Age Benefit
45	Taxes - Real Estate
46	
47	Taxes - Other
48	Taxes - New York State Franchise
49	First Aid Supplies
50	Overall Cleaning Expense
51	Office Supplies - Stationery - Printing
51A	Price Quotations & Proposal Forms
52	Telegraph & Telephone
53	Postage
54	Advertising - Fred Wittner
55	Traveling & Entertainment
55P	Traveling & Entertainment - Pittsburgh
56	Development Expense (Material & Parts Purchase Only)
57	New York Office Expense - Rent, Maintenance, etc.
58	Commissions & Royalties
59	Physical Examinations
60	Miscellaneous Advertising
61	Bad Debts
62	Collection Fees
63	Group Insurance Contributions
64	
65	Contributions
66	Dues & Subscriptions
67	
68	Discount Allowed
69	
70	
71	Legal Auditing & Prof. Fees - 100% Dept. Expense Proration
72	Interest Expense - 100% Dept. Expense Proration
73	Demurrage
74	Outside Trucking Expense
75	Freight - Outgoing
76	Freight - Incoming
77	Outside Service Charges

Figure 4-2
(Cont'd.)

ACCT. NO.	NAME OF ACCOUNT
78	Outside Loading Expense
79	Rental on Leased Machinery
80	Rental on Building (Sim-Par)
81	Rental on Land (H-M-C)
82	Management Expenses - Dept. Expenses Prorated Monthly
83	
84	
85	Green Island Real Estate Expense
85A	Watervliet Real Estate Expense
86	Menands Rental Property - Insurance
87	Menands Rental Property - Light & Heat
88	Menands Rental Property - Maintenance Supplies
89	Menands Rental Property - Real Estate Taxes
90	
91	Menands Rental Property - Depreciation
92	Hudson River Real Estate Expenses
93	Amortization of Improvements on Leased Properties

Figure 4-2
(Cont'd.)

CHART SHOWING FORMATION OF STANDARD COST SYSTEM AND SUBSEQUENT USE IN BUDGET ESTABLISHMENT.

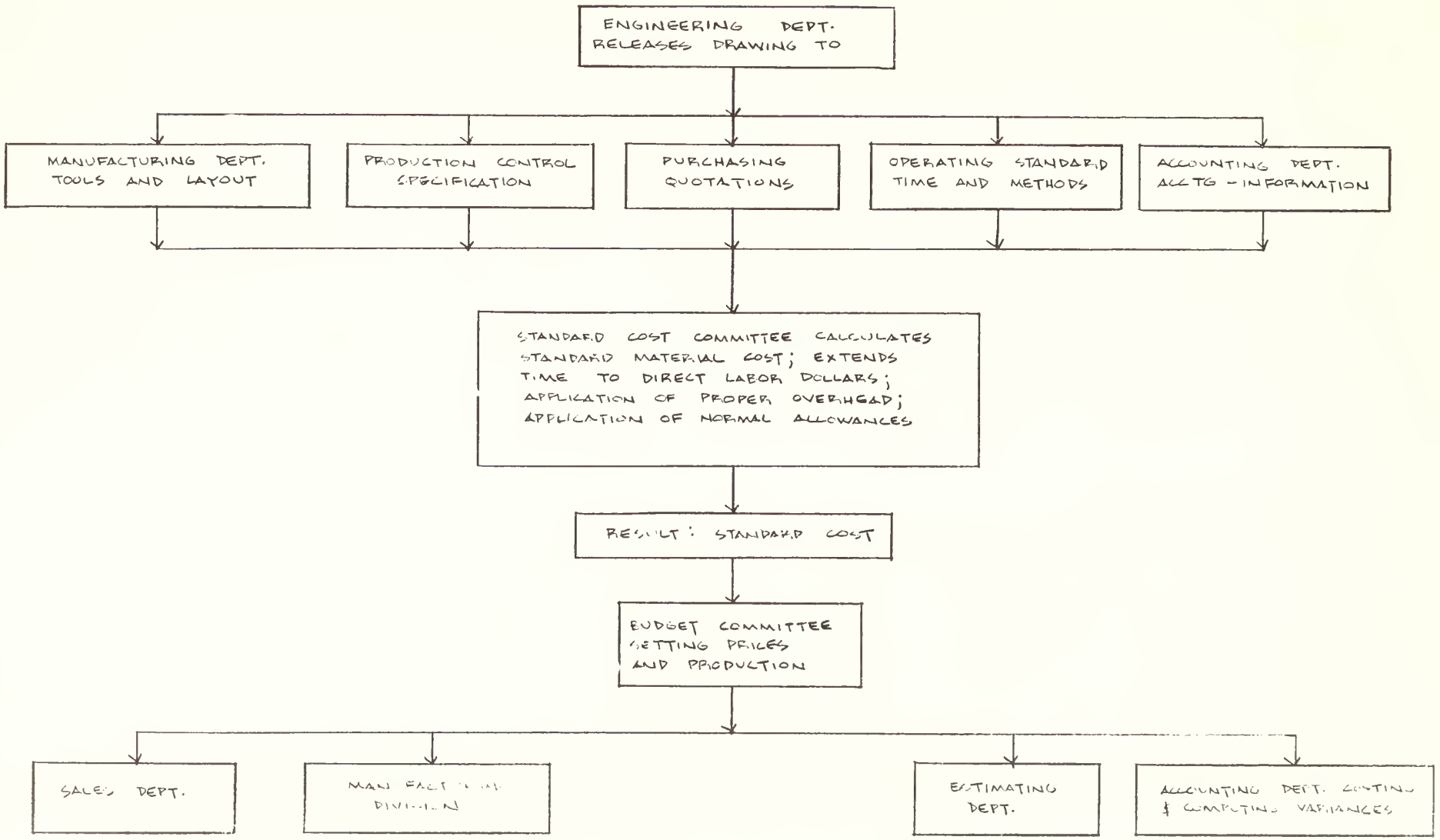

ENGINEERING DEPT. RELEASES DRAWING TO
MANUFACTURING DEPT. TOOLS AND LAYOUT
PRODUCTION CONTROL SPECIFICATION
PURCHASING QUOTATIONS
OPERATING STANDARD TIME AND METHODS
ACCOUNTING DEPT. ACCTG - INFORMATION
STANDARD COST COMMITTEE CALCULATES STANDARD MATERIAL COST; EXTENDS TIME TO DIRECT LABOR DOLLARS; APPLICATION OF PROPER OVERHEAD; APPLICATION OF NORMAL ALLOWANCES
RESULT: STANDARD COST
BUDGET COMMITTEE SETTING PRICES AND PRODUCTION
SALES DEPT.
ESTIMATING DEPT.

FIGURE 4-3

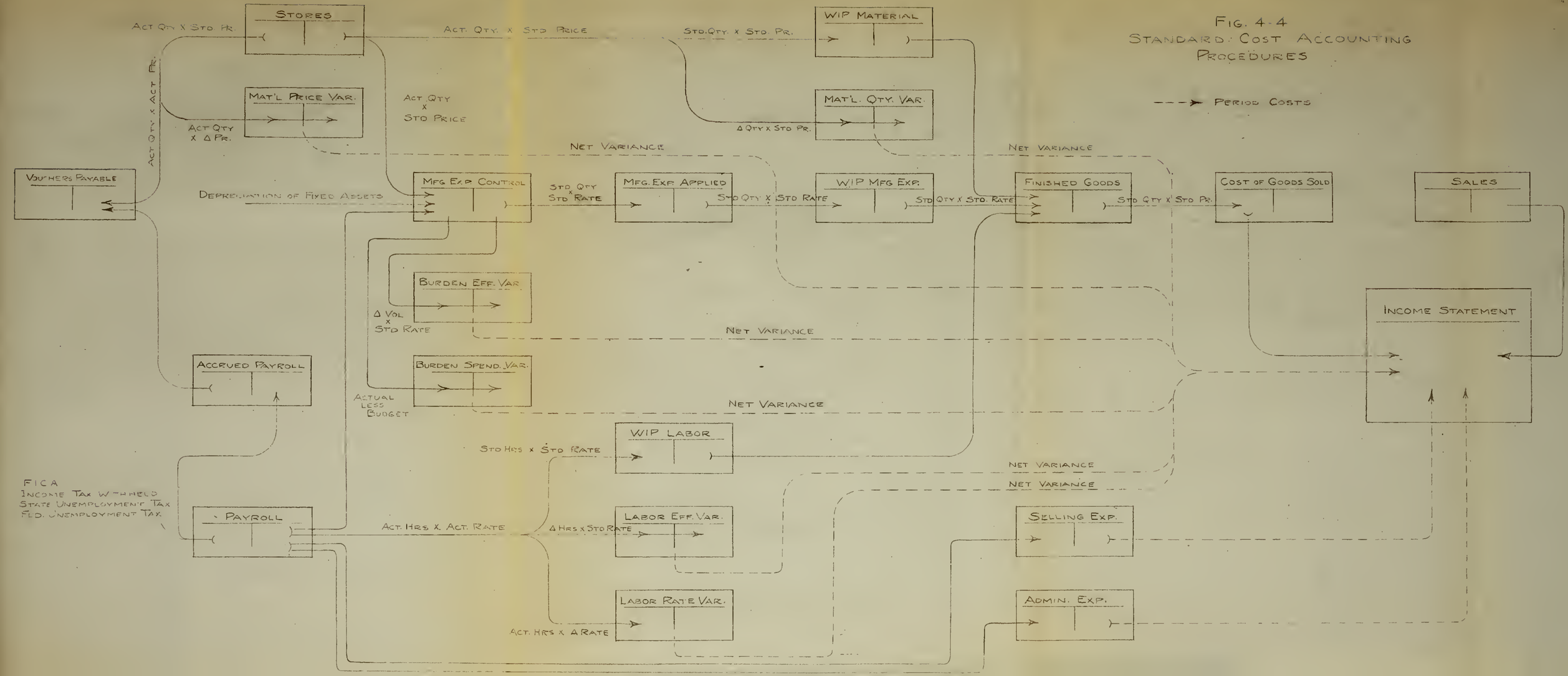


FIG. 4-4
STANDARD COST ACCOUNTING PROCEDURES

---➤ PERIOD COSTS

INCOMING MAIL TO MACH. TOOL CORP.

WAITS ATTENTION

MAIL SEPARATED

FASTENER DIV. MAIL PUT IN OUTGOING BASKET

WAITS TRANSPORTATION

TO FASTENER DIV.

WAITS ATTENTION

OPENED BY MAIL CLERK

CUSTOMER ORDER WAITS TRANSPORTATION

TO TRAFFIC MGR.

WAITS ATTENTION

CREDIT CHECKED

TO TYPIST

WAITS ATTENTION

TRANSCRIPT PREPARED

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO ASST. SALES MGR.

WAITS ATTENTION

ORDER ACKNOWLEDGEMENT PREPARED, DELIVERY DATE DETERMINED, AND PRICE VERIFIED

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO TRAFFIC MGR.

WAITS ATTENTION

PRICE EXTENDED ON TRANSCRIPT, SALES AGENT DETERMINED AND SHIPPING INSTRUCTIONS ESTABLISHED

TO TYPIST

WAITS ATTENTION

SALES ORDER PREPARED, SEPARATED AND ROUTED

LEGEND

- OPERATION
- TRANSPORTATION
- DELAY/STORAGE

PRICE EXTENDED ON TRANSCRIPT, SALES AGENT DETERMINED AND SHIPPING INSTRUCTIONS ESTABLISHED

TO TYPIST

WAITS ATTENTION

SALES ORDER PREPARED, SEPARATED AND ROUTED

ORIGINAL (WHITE) SALES ORDER

TO FILE BASKET

WAITS ATTENTION

FILED IN FASTENER DIVISION

FIRST COPY (YELLOW) SHIPPING ORDER

WAITS ATTENTION

ATTACHED TO CUSTOMERS ORDER

TO FILE BASKET

WAITS ATTENTION

FILED IN OUTSTANDING ORDER FILE BY ORDER

WAITS COMPLETION OF ORDER

INITIATES ACTION ON SHIPPING ORDER TO REMOVE FROM FILE

INVOICE AND SHIPPING PAPERS PREPARED, SHIPPING ORDER ATTACHED TO INVOICE

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO ACCOUNTING DEPT. MACH. TOOL CORP.

WAITS ATTENTION

WAITS PROCESSING OF INVOICE

ATTACHED TO OFFICE COPY OF INVOICE AND CUSTOMERS ORDER

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO FASTENER DIV.

WAITS ATTENTION

FILED IN FASTENER DIV.

SECOND COPY (PINK) SHOP ORDER

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO PRODUCTION CONTROL

WAITS ATTENTION

AVAILABILITY OF MATERIAL CHECKED

TO FILE BASKET

WAITS ATTENTION

FILED

THIRD COPY (ORANGE) SHOP ORDER

WAITS ATTENTION

FILED IN OUTSTANDING ORDER FILE BY PRODUCT

INITIATES ACTION ON SHOP ORDER TO REMOVE FROM FILE AND PLACE IN BASKET

WAITS ATTENTION

FILED IN COMPLETED ORDER FILE

FOURTH COPY (GREEN) ENGINEERING

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO PLANT SUPT.

WAITS ATTENTION

ORDER FILLED FROM STOCK OR MANUFACTURED

WAITS FILLING OF ORDER

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO TYPIST

WAITS ATTENTION

INITIATES ACTION ON SHOP ORDER AND SHIPPING ORDER COPIES

ATTACHED TO COPIES OF SHIPPING PAPERS

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO SHIPPING SECTION

WAITS ATTENTION

REMOVED FROM SHIPPING PAPERS

TO OUTGOING BASKET

WAITS TRANSPORTATION

TO PLANT SUPT.

WAITS ATTENTION

FILED IN PLANT SUPERINTENDENT'S FILE

FIFTH COPY (YELLOW) FILE

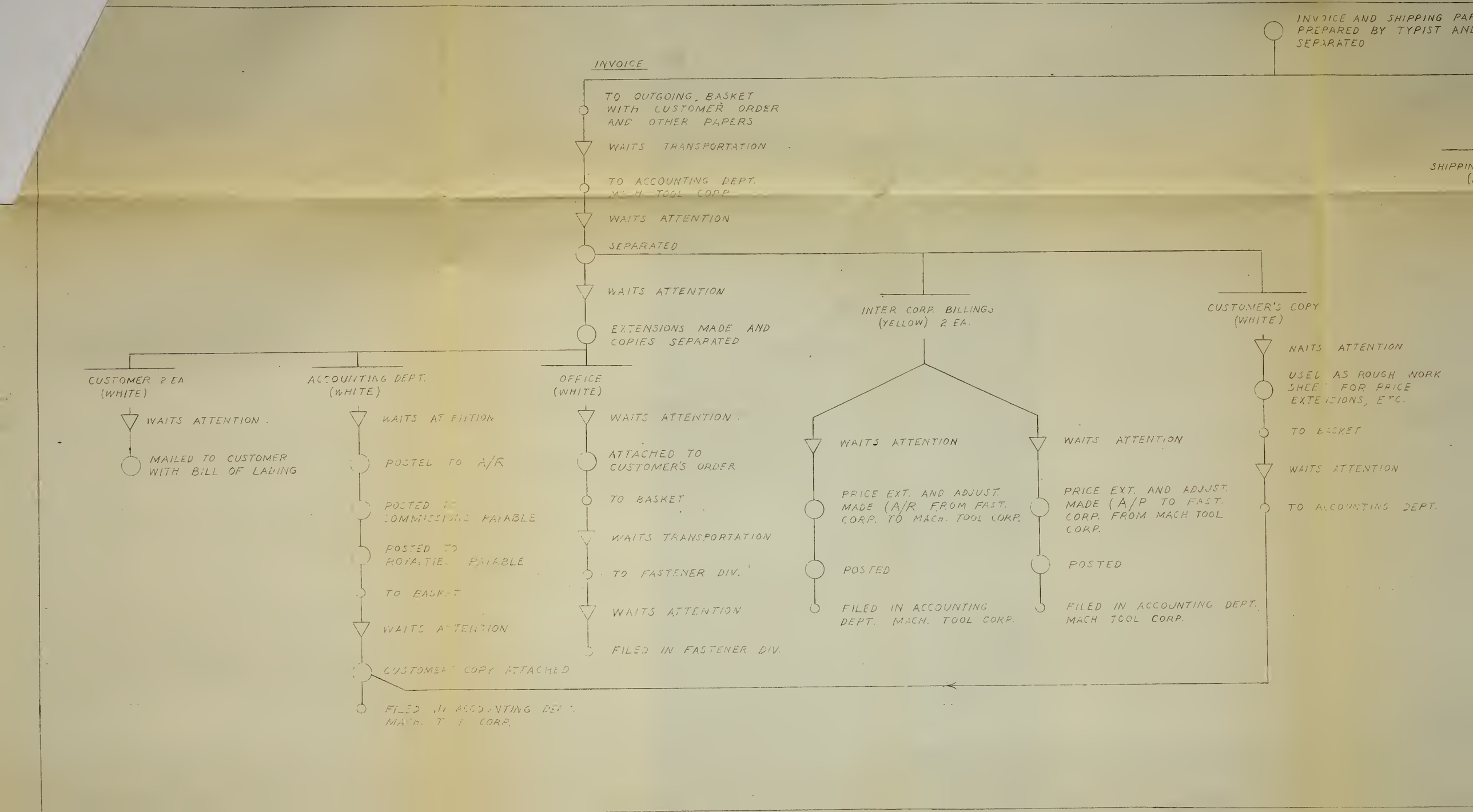
WAITS ATTENTION

MAILED TO SALES AGENT

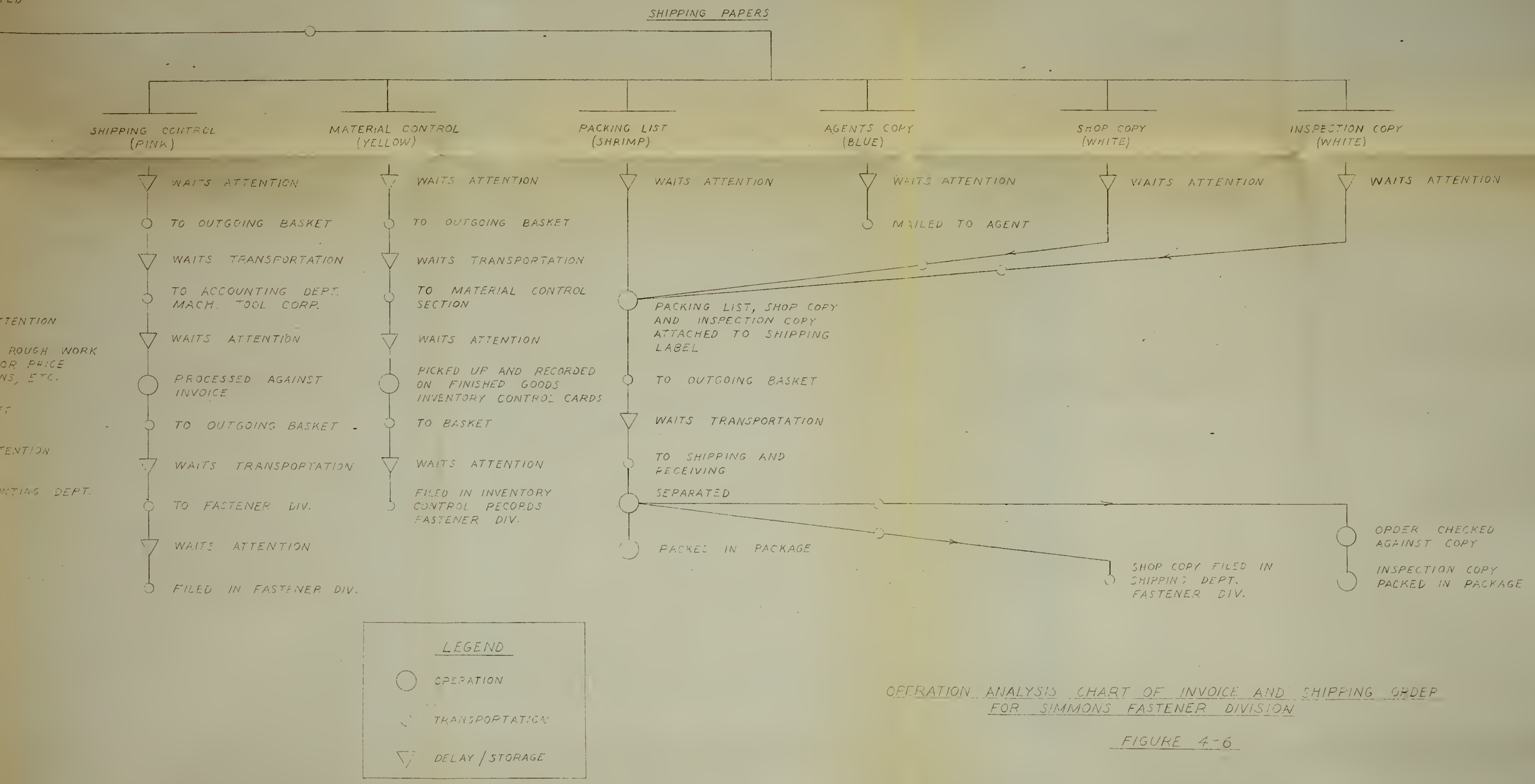
OPERATION ANALYSIS CHART OF SALES ORDER FOR SIMMONS FASTENER DIVISION

FIGURE 4-5

FIGURE 4-5


INVOICE AND SHIPPING PA
PREPARED BY TYPIST AN
SEPARATED
INVOICE
TO OUTGOING BASKET WITH CUSTOMER ORDER AND OTHER PAPERS
WAITS TRANSPORTATION
TO ACCOUNTING DEPT. MACH TOOL CORP.
WAITS ATTENTION
SEPARATED
SHIPPIN
WAITS ATTENTION
EXTENSIONS MADE AND COPIES SEPARATED
INTER CORP. BILLINGS (YELLOW) 2 EA.
CUSTOMER'S COPY (WHITE)
CUSTOMER 2 EA (WHITE)
ACCOUNTING DEPT. (WHITE)
OFFICE (WHITE)
WAITS ATTENTION
MAILED TO CUSTOMER WITH BILL OF LADING
WAITS ATTENTION
POSTED TO A/R
POSTED TO COMMISSIONS PAYABLE
POSTED TO ROYALTIES PAYABLE
TO BASKET
WAITS ATTENTION
CUSTOMER COPY ATTACHED
FILED IN ACCOUNTING DEPT. MACH. TOOL CORP.
WAITS ATTENTION
ATTACHED TO CUSTOMER'S ORDER
TO BASKET
WAITS TRANSPORTATION
TO FASTENER DIV.
WAITS ATTENTION
FILED IN FASTENER DIV.
WAITS ATTENTION
PRICE EXT. AND ADJUST. MADE (A/R FROM FAST. CORP. TO MACH. TOOL CORP.
POSTED
FILED IN ACCOUNTING DEPT. MACH. TOOL CORP.
WAITS ATTENTION
PRICE EXT. AND ADJUST. MADE (A/P TO FAST. CORP. FROM MACH TOOL CORP.
POSTED
FILED IN ACCOUNTING DEPT. MACH TOOL CORP.
WAITS ATTENTION
USED AS ROUGH WORK SHEET FOR PRICE EXTENSIONS, ETC.
TO BASKET
WAITS ATTENTION
TO ACCOUNTING DEPT.

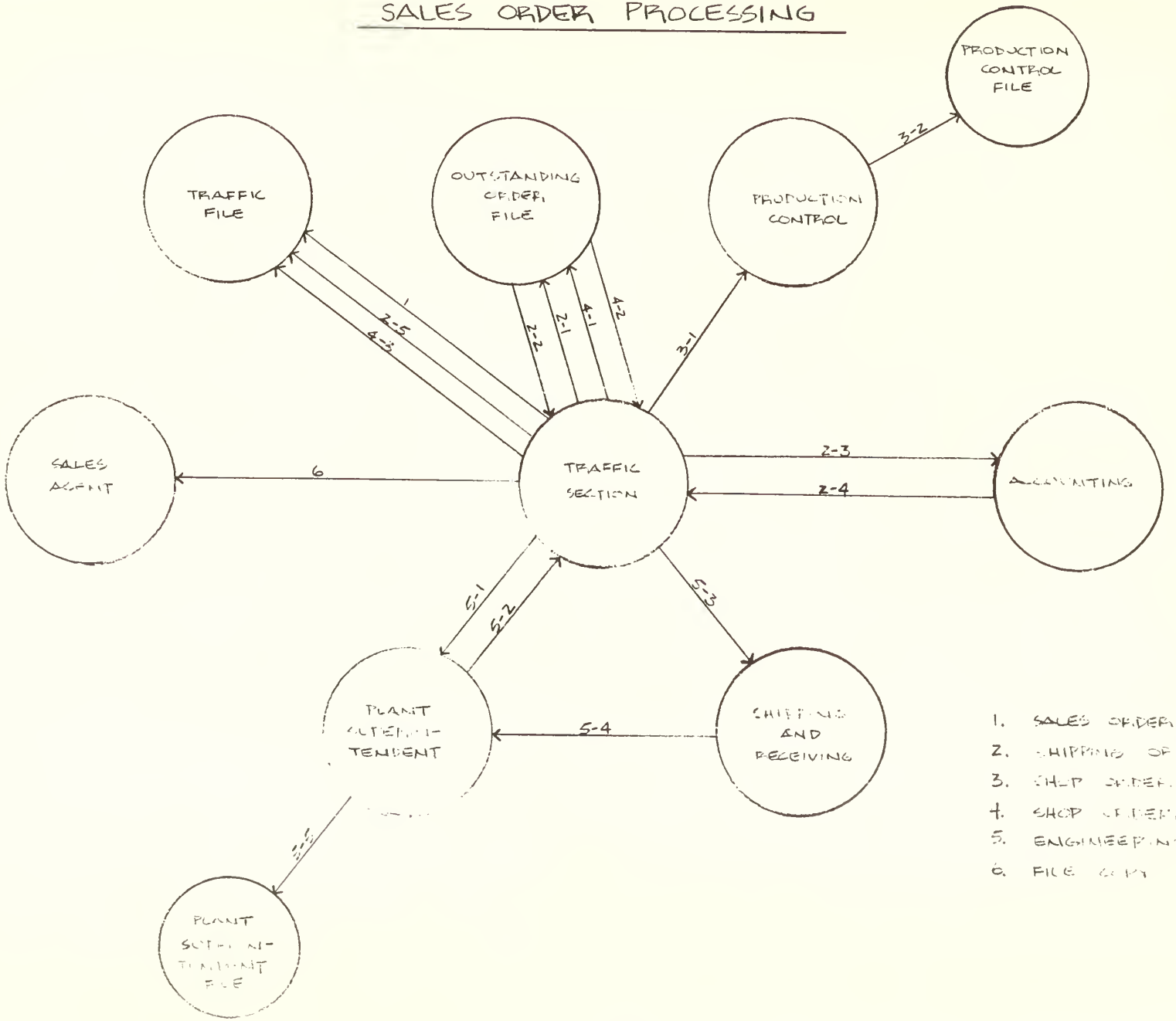
AND SHIPPING PAPERS
ED BY TYPIST AND
TED



OPERATION ANALYSIS CHART OF INVOICE AND SHIPPING ORDER FOR SIMMONS FASTENER DIVISION

FIGURE 4-6

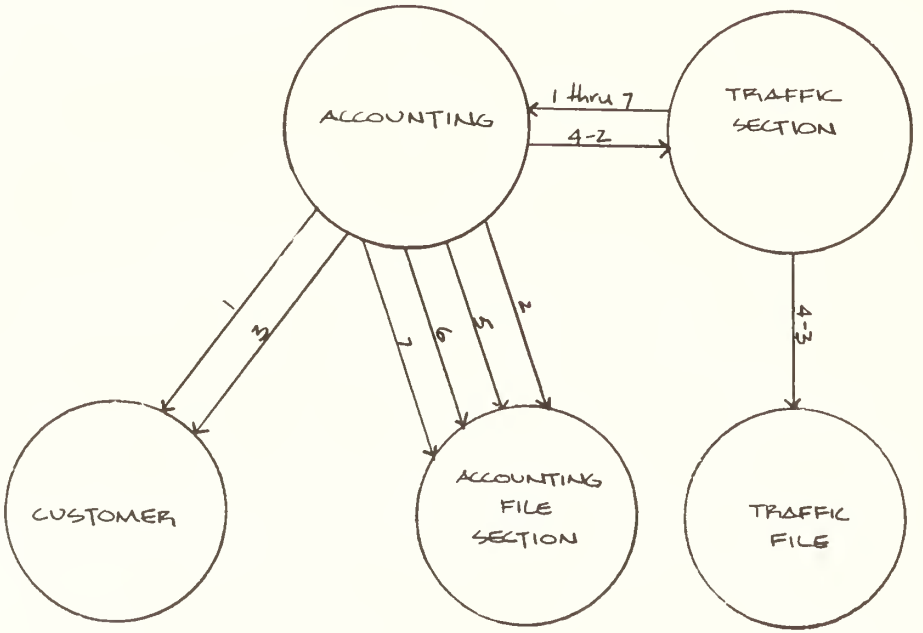
SALES ORDER PROCESSING



1. SALES ORDER (ORIGINAL)
2. SHIPPING ORDER
3. SHOP ORDER No. 1
4. SHOP ORDER No. 2
5. ENGINEERING COPY
6. FILE COPY

FIGURE 4-7

INVOICE PROCESSING



1. CUSTOMER COPY
2. ACCOUNTING DEPARTMENT
3. CUSTOMER DUPLICATE COPY
4. OFFICE COPY
5. INTERCORPORATION BILLINGS
6. INTERCORPORATION BILLINGS
7. CUSTOMER COPY

FIGURE 4-8

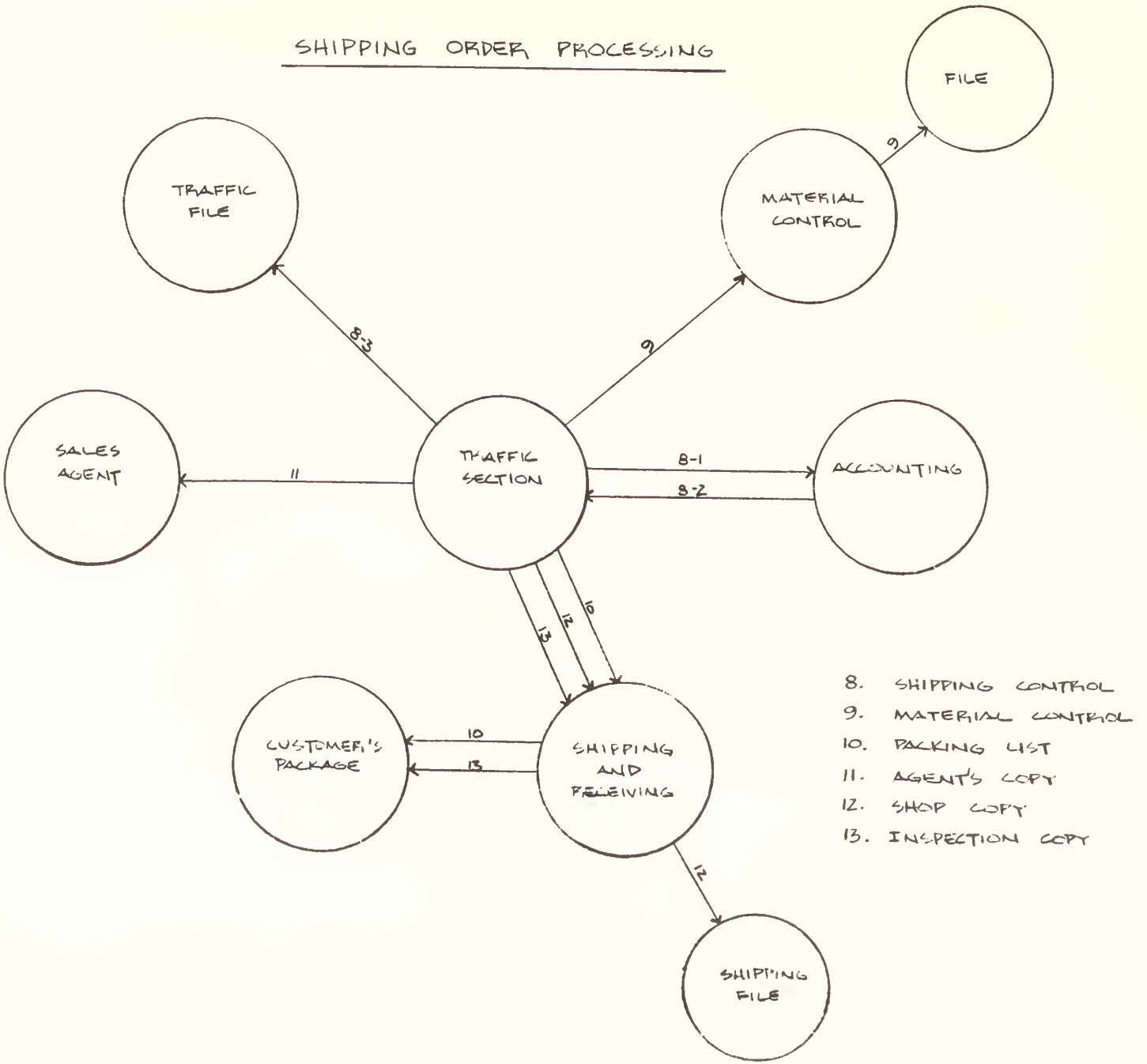

SHIPPING ORDER PROCESSING
FILE
TRAFFIC FILE
MATERIAL CONTROL
9
8-3
9
SALES AGENT
11
TRAFFIC SECTION
8-1
8-2
ACCOUNTING
13
12
10
CUSTOMER'S PACKAGE
10
13
SHIPPING AND RELEIVING
12
SHIPPING FILE
8. SHIPPING CONTROL
9. MATERIAL CONTROL
10. PACKING LIST
11. AGENT'S COPY
12. SHOP COPY
13. INSPECTION COPY

FIGURE 4-9

thesA164
A management survey ... Simmons Machine
3 2768 001 90878 3
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